National Energy Board

Office national de l'énergie

National Energy Board Workshop 2005

COLLABORATING FOR REGULATORY IMPROVEMENT

NEB WORKSHOP PROCEEDINGS

Canada

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NEB Workshop Proceedings
June 6-8, 2005
Calgary Telus Convention Centre

Canada

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Please note: all speakers are Board staff unless otherwise indicated

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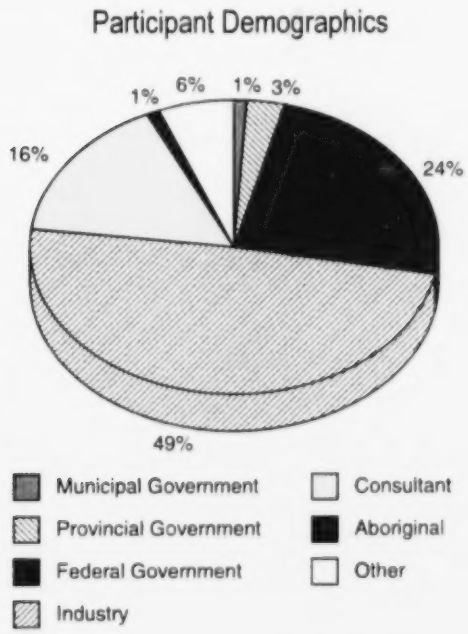
Introduction

Robert LeMay, 2005 NEB Workshop Co-Chair
Linda Postlewaite, 2005 NEB Workshop Co-Chair

The 2005 NEB Workshop was held June 6-8, 2005 at the Calgary TELUS Convention Centre, Alberta, Canada. The workshop attracted 359 participants representing more than 108 organizations including: industry; municipal, provincial and federal agencies; consultants; and Aboriginal groups. The pie chart below provides a graphical depiction of participant demographics.



The June 2005 workshop was the NEB's third workshop[1]. The workshop brought together NEB staff and stakeholders to discuss technical and regulatory initiatives, especially a number of new and improved regulatory tools and documents. The workshop provided an opportunity to communicate, review and discuss goal-oriented regulations, such as the *Onshore Pipeline Regulations, 1999*, the proposed *Submerged Pipeline Regulations* and the NEB's Integrated Compliance initiative.

There were five key goals for the workshop: to communicate, to refine initiatives, to consult, to inform and to enhance. In keeping with the theme for the event, *Collaborating for Regulatory Improvement*, the workshop was highly interactive. The workshop forum allowed direct interaction between the NEB and stakeholder groups, and will improve relationships by explaining the NEB's expectations, processes and procedures.

The sessions were split up into seven streams:

- Regulatory Initiatives
- Internal Initiatives
- Environmental Protection
- Safety Management
- Integrity Management
- Emergency and SecuityManagement
- Human Environment

The NEB would like to thank all the participants for their interest and assistance in making the 2005 workshop a success. The NEB will be incorporating the feedback received as its moves forward in developing and modifying its regulations, documentation and programs.

1 The first two NEB workshops were held in June 2002 and December 2003 in Calgary. For the 2003 Proceedings see http://www.neb-one.gc.ca/Publications/NEBWorkshops/2003NEBWorkshopProceedings_e.pdf

General

Introductory Remarks

Gaétan Caron, Vice-Chairman, National Energy Board (NEB)

Mr. Caron noted that 400 people have registered for this workshop and those numbers send the message that this workshop is an effective format for industry to make its views known. He indicated that a collaborative approach has evolved for the NEB over the years. He noted that this workshop is an excellent example of this trend, and that a collaborative approach helps the Board leverage knowledge to initiate, develop and refine its regulatory processes and programs.

Mr. Caron discussed the Board's priorities and shared its five goals:

- Goal 1 – NEB regulated facilities and activities are safe and secure, and are perceived to be so
- Goal 2 – NEB-regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected
- Goal 3 – Canadians derive the benefits of economic efficiency
- Goal 4 – The NEB fulfills its mandate with the benefit of effective public engagement
- Goal 5 – The NEB fulfils its mandate with the benefit of effective leadership and quality management of affected processes

Through its yearly strategic planning process, the NEB established the following priorities.

Goal-oriented Regulation

This priority will align the NEB with the federal Smart Regulation Initiative. Goal-oriented regulation includes a mix of goal-based, performance-based and prescriptive components. Regulations that are goal-based identify and focus on desired outcomes and the use of management systems to achieve goals and manage risks while providing flexibility for companies.

There are two goal-oriented regulations that have become law: *Onshore Pipeline Regulations, 1999 (OPR-99)* and *Processing Plant Regulations*. Two other regulations have been drafted and another two are being combined and adapted. Input is being sought at this workshop for a new regulation, the proposed NEB *Submerged Pipeline Regulations* and for an updated version of the *OPR-99*.

Energy Market Information

In 2003/04, the NEB asked for comments from stakeholders on the effectiveness and content of its energy market monitoring program. Feedback indic ted that the NEB has an important role and is in a unique position to provide objective and impartial information to federal and provincial policy makers.

Public Participation

Understanding how the public can and wants to be involved with NEB processes helps the NEB offer effective public engagement options. During the past few years, the NEB has increased the number of information meetings and hearings held in affected communities as well as holding more community consultation sessions to provide information and seek input. Most recently, the Board has had considerable success with the Appropriate Dispute Resolution (ADR) process. The NEB now receives over 400,000 'hits' on its Web site each year, and the Internet has become the preferred means of communications for many stakeholders.

Awareness and Understanding of the NEB Mandate

Through interactions with stakeholders and the public, the NEB became aware that the its role is unclear to many people. Its life-cycle responsibilities for pipelines and related facilities, in particular, could be better understood. The Board also needs to communicate its role more clearly to its northern partners and with the smaller Group 2 companies. The NEB is looking at opportunities to broaden its reporting capacity and leverage communications efforts. Safety performance and incident reporting are also important, and the NEB is developing a guidance document to clarify requirements. Input on this document will be sought at this workshop.

Cooperation and Partnerships

Cooperation and partnerships provide opportunities to improve processes and use resources more effectively. An example of such a partnership now under development is with the United States Department of Transport, Office of Pipeline Safety (OPS). A more formal partnership between the two agencies will contribute to a more effective regulatory program.

Enhanced Performance

The NEB's aim is to have a performance-based culture of excellence. Internally, the NEB has begun implementing an ISO-based Quality Management System. A new business unit, called Policy, Planning and Coordination, has also been established. One of the first related initiatives is the development of an Integrated Compliance program, which will also be reviewed at this workshop.

Mr. Caron also reviewed some specific work related to emergency management, pipeline integrity and environmental protection.

Emergency Management

At the last workshop, participants said they would like the opportunity to explore different methodologies to identify potential hazards and put in place effective emergency management programs. A full day of sessions will address this issue. Since the last workshop the *National Energy Board Act* has been amended to provide the NEB with a clear statutory basis for regulating the security of the energy infrastructure under its jurisdiction. The NEB has completed a number of pipeline security assessments to obtain a better understanding of how pipeline facilities are currently managing security issues. A Pipeline Public Awareness Workshop was held in Montreal in September 2004.

Integrity Management

The NEB's oversight of integrity management currently consists of integrity audits, inspections and periodic meetings with regulated companies. Twenty-two percent of findings identified through audits are related to integrity management. Considerable time and effort has recently been dedicated to the development of integrity performance indicators. This topic will also be discussed at the workshop.

Environmental Management

The environmental sessions at the December 2003 workshop took a life-cycle approach. Since then, the NEB Filing Manual has been issued and implemented. Feedback on the new manual will be sought. For several years, the NEB has used the percent of environmental conditions that achieve their desired end result as a key performance indicator for evaluating environmental protection. There is a increased desire to identify and develop additional indicators. This topic will also be discussed.

A copy of Mr. Caron's speech is included in the Appendix.

Smart Regulation and the NEB

Jim Fox – Team Leader, Regulatory Development

Smart Regulation is an initiative of the federal government. An External Advisory Committee on Smart Regulation (EACSR) was formed in 2003 to address the following areas:

- Develop a modern regulatory strategy
- Identify areas of reform
- Provide an external perspective

In September 2004 after extensive external consultation, the committee produced its Report on Action and Plans (RAP). This report is available at www.smartregulation.gc.ca.

The committee determined that Smart Regulation is:

- Both protecting and enabling – working to avoid negative consequences from industry
- More responsive to the needs of all stakeholders
- Governs cooperatively, between nations, government and government departments

Highlights of the report's recommendations address:

- Cooperation – at all levels: federal, federal/provincial/territorial, as well as cooperation among international regulators
- Risk management – a government-wide approach was recommended for risk prioritization, risk assessment and risk communication
- A framework for the development of appropriate regulatory instruments should be created
- A new federal regulatory policy and new performance measurements, compliance and enforcement tools should be developed
- The government should work to ensure appropriate policy research and development are carried out and that staff have the right tools and training

There were also three sector-specific recommendations that relate to the NEB's mandate:

- First Nations economic development
- Environmental assessment process
- Oil and gas exploration and development

Since the report was produced, the government has undertaken a number of initiatives, as follows:

- A secretariat has been set up by the Privy Council Office (PCO)
- Actions and plans published
- Five theme tables (interdepartmental working groups) were established by the PCO:
  1. Healthy Canada
  2. Environmental Sustainability
  3. Safety and Security
  4. Innovation, Productivity and Business Environment
  5. Aboriginal Prosperity and Northern Development

NEB has been moving to support Smart Regulation. The Board has modified its vision statement – it is now "to be a respected leader in regulation that protects and enables in the Canadian public interest."

The NEB's Smart Regulation strategies address the following areas:

- Goal oriented regulation – including less rigorous oversight of high performers
- Regulatory clarity – better guidance documents, no surprises for industry
- Streamlining – take out unnecessary steps
- Partnering – more alignment with other agencies and regulators

This workshop is a key initiative to advance regulatory clarity and partnering. Industry's feedback and input are encouraged.

NEB 101

Paul Trudel

The purpose of this session was to provide attendees who may not be familiar with the National Energy Board (NEB) with an overview of the NEB organization, the Acts and Regulations administered by the NEB and how the organization regulates. This session was created in response to feedback from the December 2003 workshop; participants at that time indicated a desire for a basic introduction to the NEB.

The NEB was established in 1959 and has jurisdiction over interprovincial and international pipelines and power transmission lines. The NEB is a quasi-judicial body; as such, it may convene hearings and must keep a written record of all proceedings and decisions. The NEB's purpose is "We promote safety and security, environmental protection and economic efficiency in the Canadian public interest within the mandate set by Parliament in the regulation of pipelines, energy development and trade." The NEB takes a life cycle approach to regulation of facilities, from design to abandonment.

The NEB regulates over 40,000 kilometres of oil and gas pipelines in Canada, also commodity pipelines (such as sulphur and carbon dioxide pipelines). The NEB's jurisdiction includes frontier areas: Northwest Territories and Nunavut; offshore of the west coast; Gulf of St. Lawrence. Large projects are approved by the federal Cabinet; smaller projects are approved by the NEB.

The NEB accepts and reviews applications for a variety of activities throughout the life of a pipeline and associated facilities. There are a number of types of applications, depending upon the size of pipeline and the complexity of the proposed activity. Routine activities can be streamlined, requiring a shorter application process or simply notifying the NEB after a routine operations or maintenance activity has been completed. The NEB is looking at further reducing the requirement for applications under Section 58 of the *National Energy Board Act* (governing pipelines less than 40 km long).

The NEB also keeps statistics on incidents (environmental and safety) and compares operations among regulated pipeline companies.

The NEB is in the process of developing and implementing an internal Quality Management System (QMS), to improve the NEB's ability to define and deliver on stakeholder expectations. This initiative supports the federal government's Smart Regulation mandate and also supports the NEB's goal-oriented approach to regulation. QMS will result in better allocation of compliance resources within the NEB, and better use of information acquired through application assessment and operations inspections/audits. The NEB is also improving the *Onshore Pipeline Regulations, 1999 (OPR-99)* and is developing a new regulatory model for submerged pipelines.

Additional detail was requested regarding the reduction of information required for Section 58 applications. The speaker indicated that the scope and breadth of certain Section 58 applications do not warrant an in-depth scrutiny prior to approval. Many of these applications relate to routine maintenance activities. By reducing the information requirements, the NEB hopes to ease the regulatory burden for companies, while still maintaining control and knowledge about pipeline operations and activities. The speaker noted that companies making application for activities under Section 58 are responsible for notifying the public about the proposed activity. The company must also demonstrate to the NEB that public notification has been carried out. The speaker further noted

that pipeline companies are responsible for the safe operation of their own lines and facilities.

The NEB audits company management systems and does follow ups to ensure that recommended improvements are made. The speaker said that the NEB was of the view that because the Board audits these systems in regulated companies, the Board itself should have similar internal systems. Therefore the NEB is implementing a quality management system.

Despite the presentation's information about the NEB's jurisdiction, there was still some confusion among audience members regarding where the NEB's jurisdiction ends and how much overlap there is with other agencies, such as the federal department of Human Resources Skills and Development Canada (HRSDC), which oversees the Canada Labour Code. The speaker responded that HRSDC is responsible for implementing the Canada Labour Code. As a result of a memorandum of understanding between HRSDC and the NEB, the NEB staff administers the Code on behalf of HRSDC in the case of pipelines that fall under the *National Energy Board Act* and does so using HRSDC policies.

Natural Justice - What is it and Why Should We Care?

Peter Enderwick

This session introduced attendees to the rules of 'natural justice', how they are applied in NEB processes, and the impacts of failing to adhere to those rules.

The NEB is a quasi-judicial body, which means that it is independent; a creature of statute; exercises court-like functions; makes decisions that affect the rights of individuals; and is subject to the rules of natural justice and procedural fairness.

The two fundamental components of natural justice are the right to be heard and the right to an impartial decision-maker.

The right to be heard is fulfilled by giving notice to persons whose interests may be affected by an NEB decision, and providing for a full and fair hearing of the application. All information that the NEB will take into account in making its decision must be disclosed to all involved parties, so they may make representations to the NEB, provide evidence, answer questions on their evidence, question the evidence of other parties, and provide final argument. All NEB hearings are public with few exceptions. *In-camera* hearings or sections of hearings may be allowed to protect proprietary information; these circumstances are rare.

A fair process also includes an unbiased decision-maker. A finding of bias does not require that actual bias exist, only the reasonable apprehension of bias. The test for bias is "what would an informed person viewing the matter realistically and practically – and having thought the matter through – conclude?" (*Committee for Justice v. NEB*, [1978] S.C.C.) Claims of bias can arise from a number of circumstances, including a financial or personal interest in the outcome of a decision; prior relationships with a party before the decision-maker; prejudgment of a case; or *ex parte* or private communications with one party to a hearing.

If the process is not fair and impartial, a decision of the Board could be overturned. A party can challenge the NEB's decisions through a judicial review or appeal. The grounds for an appeal could include:

- The NEB did not act within its jurisdiction;
- The NEB did not correctly apply relevant laws;
- The NEB did not follow the rules of natural justice.

The NEB has a low threshold for the public to become involved in a hearing – essentially, any interested party can be an intervenor. This is unlike the Alberta Energy and Utilities Board (EUB), which restricts participation to "directly affected" parties in facilities hearings. However, unlike the EUB, the NEB does not provide intervenor funding.

The matter of due diligence in relation to public consultation and intervenor status raised several questions. One audience member pointed out that despite efforts on the part of a pipeline company to conduct due diligence in advance of an application, especially with regard to public information and liaison with First Nations, it is still possible for an outside group to raise objections and gain standing as an intervenor in an application hearing. Another audience member questioned the NEB's low threshold for obtaining intervenor status, while another observed that since significant time and effort are required to perform due diligence, has there been an effort on the NEB's part to streamline this process?

The speaker responded that the applicant submits information about its public consultation activities as part of the application and the Board takes them into consideration. Companies must demonstrate that they have taken all reasonable actions to inform interested parties of the proposed activities and impacts, and that the company has made efforts to resolve concerns and conflicts. Each case is unique and the NEB examines all evidence. In terms of streamlining processes, the NEB offers appropriate dispute resolution services to assist parties in resolving differences or narrowing issues between them outside of the hearing process.

The NEB's Rules of Practice and Procedure set out the process for gaining intervenor status; any interested person may send a letter to the NEB stating interest and the NEB generally accepts these letters and grants intervenor status, as long as letters are received by the deadline. After the deadline it can be more difficult for interested parties to gain intervenor status.

The NEB may allow oral statements in hearings by persons who do not wish to participate in the hearing as a full intervenor but simply wish to provide their views of a project.

A question was raised about the avenue or process required to appeal after the NEB has issued an approval. An application to have the Board review a decision can be made directly to the Board. An application to appeal a decision is made to the Federal Court of Appeal.

Luncheon Address

Jim Donihee , NEB Chief Operating Officer

National Energy Board Chief Operating Officer Jim Donihee addressed workshop participants at a wrap-up luncheon. He summarized the messages participants gave to NEB employees over the three-day workshop, indicating Board staff would use these messages to guide their efforts:

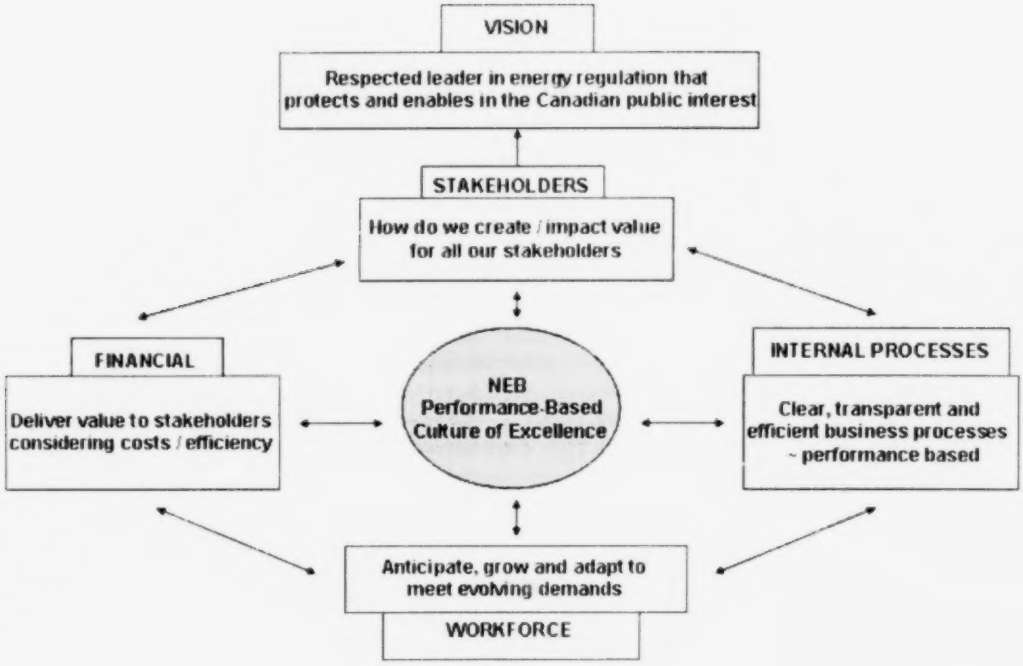
- Be clear about how all the initiatives fit
- Coordinate your efforts
- Use common sense and flexibility
- Use feedback as you create programs
- Align with and learn from other regulators and agencies – take advantage of linkages & overlaps
- Consider the financial impact

Donihee then talked about how the NEB's relationships with its various stakeholders support its vision of being a respected leader in energy regulation that protects and enables in the Canadian public interest. These relationships are combined with performance-based internal business processes that are clear, transparent and efficient; a workforce that anticipates, grows and adapts to meet evolving demands; and the ability to delivery value to shareholders considering costs and efficiency.

Strategies and initiatives the NEB employs to achieve its vision include goal-oriented regulation, integrity management, environmental protection, safety, enabling public participation and promoting cooperation and partnerships.

The Big Picture

``our activities in context``


VISION
Respected leader in energy regulation that protects and enables in the Canadian public interest
STAKEHOLDERS
How do we create / impact value for all our stakeholders
FINANCIAL
Deliver value to stakeholders considering costs / efficiency
NEB Performance-Based Culture of Excellence
INTERNAL PROCESSES
Clear, transparent and efficient business processes ~ performance based
Anticipate, grow and adapt to meet evolving demands
WORKFORCE

Strategies:

- Goal oriented regulation
- Energy market information
- Enable public participation
- Promote awareness and understanding of NEB mandate
- Promote cooperation and partnerships
- Enhance performance

Inititatives/ Measures

The pieces – the initiatives:

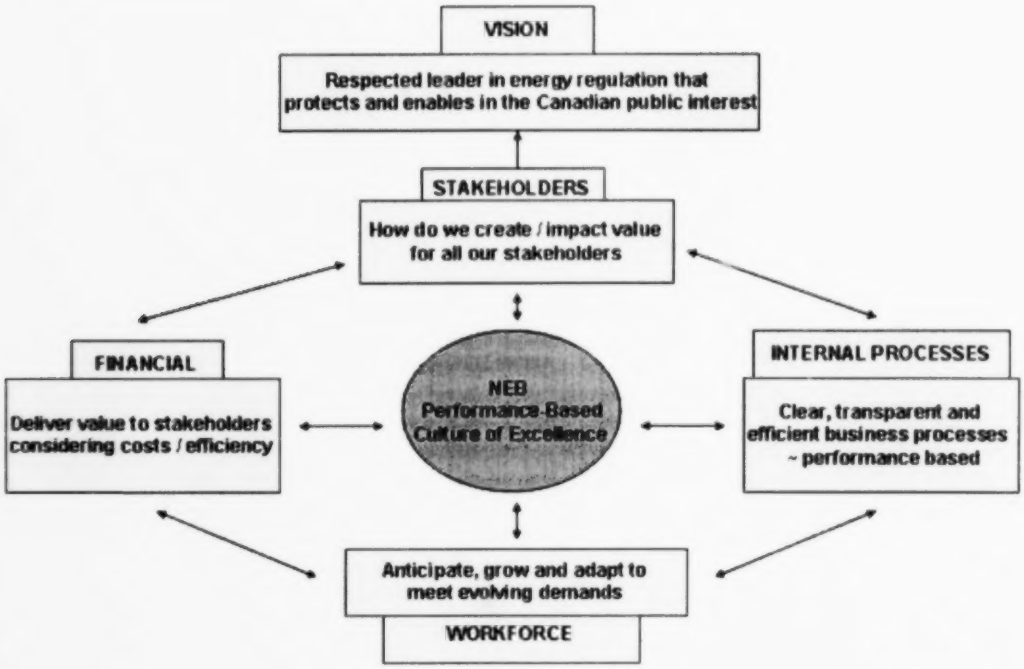
- Goal oriented regulation - Stakeholder, Financial
- Emergency / Security Management
- Integrity Management
- Internal Initiatives
- Environmental Protection
- Human Environment
- Safety

Goals & Strategies

Vision

The Big Picture

"our activities in context"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- Integrity Management
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- Environmental Protection
- Human Environment
- Safety

Goals & Strategies

Vision

Regulatory Initiatives

Goal-Oriented Regulation and an Update on Regulations

Abby Dorval
Karen Blank

This session's topics included:

- The NEB's regulatory program
- What the term "goal-oriented regulation" means and what the NEB hopes to achieve by using this approach
- The status of various NEB regulatory initiatives that are using the goal-oriented approach

The NEB has created a new business unit, Policy Planning and Coordination, with the goal of taking a long-term view of planning and regulatory development. The new business unit will focus on risk-based assessment and goal-oriented regulation, resulting in better and more effective regulations and management, regulatory clarity, good communication and guidance.

The new business unit is a 'work in progress'; industry should expect to see opportunities to provide comment and input, such as this morning's session.

Smart Regulation (SR) is a broad initiative of the federal government. SR is interest-based and enabling, versus position-based and protecting. The Privy Council is developing a regulatory program guide for all federal agencies. Specific initiatives include:

- A management system for the development and implementation of regulations
- Regulatory policy
- Regulatory impact analysis based on risk
- Instrument choice framework
- Guide for effective regulatory consultations
- A triage system for regulatory submissions

The NEB continues with the development of goal-oriented regulation. This is defined as regulations expressed as desired outcomes, with more flexible performance objectives than previous regulations. The NEB currently uses three types of regulation:

- prescriptive – prescribes the means to obtain an objective
- performance-based – indicates and quantifies an objective, but does not prescribe the means
- goal-based – indicates an objective but does not quantify it nor prescribe the means

Goal-oriented regulation seeks to balance the use of all three types. The NEB's Guidance Notes provide examples of ways to achieve the goal. The NEB feels that this hybrid approach results in clear and predictable regulatory processes, effective cooperation and partnerships, providing industry with flexibility to develop optimal solutions. Goal-oriented regulation permits the use of good judgment and experience and allows for innovation.

The speakers noted the following NEB regulatory initiatives that are moving toward goal-oriented regulation:

- Damage Prevention Regulations – now in goal-oriented format, under review by the federal Department of Justice
- Cost Recovery Regulations (electricity) – consultation stage
- *Onshore Pipeline Regulations,1999* – a review of current regulations is ongoing, the NEB is seeking input at this workshop
- Submerged Pipeline Regulations (SPR) – this regulation is still at the concept stage

- Under the *Canada Oil and Gas Operations Act* (COGOA) the Drilling, Production and Conservation Regulations are receiving stakeholder feedback for goal-oriented initiatives and changes to the Diving Regulations are under review by the federal Justice Department

Board staff was asked what processes it uses to stay up-to-date with changes in a dynamic industry. The speaker indicated that the NEB uses a wide range of tools. Regulators and strategic planners are now on the same team, which should result in an update to the NEB's strategic planning approach. In November 2004, the NEB held a planning workshop and used the input from that event in the development of their strategic plan. New approaches are under review.

On the question of integration with other federal and provincial regulators, the speakers noted that the NEB coordinates at a high level with other federal agencies. For example, environmental assessment continues to be a challenge, and Smart Regulation could mean changes to the Canadian Environmental Assessment Act. This would require coordination between the Canadian Environmental Assessment Agency and the NEB. The NEB also meets with provincial agencies such as the Alberta Energy and Utilities Board to share best practices and coordinate long-term planning and harmonization.

A question was raised about the proportion of each type of regulation (prescriptive, performance, goal-based). The speakers replied that the NEB will use what makes sense in a given situation. The objective is to provide industry with the maximum flexibility to use new technology and innovation. However, an audience member noted that small companies have fewer resources and the regulatory onus seems to be shifting away from the NEB and onto pipeline companies. The speakers agreed that onus is on the operators to assess their own risk and conduct their operations accordingly, but the NEB remains responsible for compliance and monitoring. The real shift lies in how companies choose to mitigate their risks; there is no actual shift in responsibility. Companies are still responsible for operating safely, and the NEB still has the authority to determine what is acceptable even within the parameters of goal-oriented regulation.

The question of audits was raised. How will the NEB conduct audits under goal-oriented regulation? The speakers responded that audit programs are evolving to accommodate goal-oriented regulations. The NEB will move to evaluating company policies and procedures instead of ensuring compliance with prescriptive regulations. The NEB expects audits to delve into company systems, both in-place and proposed. This move by the NEB is compatible with the general industry move toward risk-based management and responsible operation.

Submerged Pipeline Regulations, Part I

Brian Nesbitt
Abby Dorval

This session presented an update on the proposed Submerged Pipeline Regulations (SPR) and introduced the main concepts of the "Health, Safety and Environment (HSE) Case" approach that the NEB proposes to use for the new SPR.

The regulation of submerged pipelines will fall under goal-oriented regulations. The SPR is being developed with several principles in mind:

- Regulation must be necessary
- Minimize overlap and conflicting regulations
- Enable and protect
- Effective and efficient
- Transparent and practicable.

The NEB is developing SPR because submerged pipelines are not addressed under the *Onshore Pipeline Regulations, 1999 (OPR-99)* and are currently given a case-by-case treatment which can be inconsistent and unpredictable.

The NEB saw significant opportunity to improve its regulatory approach by using an HSE Case approach. HSE Case aligns with business processes. An HSE Case is a set of summary documents prepared by a company that set out a thorough, systematic approach as to how the company will identify and manage the hazards and risks associated with specific facilities and actions. HSE Case is based on a good internal management system. The HSE Case demonstrates that the company has a systematic process to establish informed and defensible risk management decisions and measures. It is a living document that is used and useful, and takes a life cycle approach.

Three key components are:

- Facility description
- Formal hazard and risk assessment
- Description of management systems to deliver corporate HSE policy.

One goal of an HSE Case approach is to reduce risk using the ALARP principle (as low as reasonably practicable). This principle take cost/benefit into consideration and assumes that risk reduction is ongoing, not a one-time test. Meeting minimum standards may not be enough to reduce risk. ALARP seeks to get the greatest risk reduction (benefit) from money spent on risk mitigation.

An HSE Case approach also enables flexibility, informed communication and greater transparency, while protecting health, safety and the environment by giving both the company and the NEB a better understanding of risks and hazards. HSE Case is effective and efficient and can be used with more than one regulator; it is transparent and predictable because without HSE Case, regulators such as the NEB tend to fall back on prescriptive-type regulations in order to control risks and hazards.

Next steps in the development of SPR: the NEB will continue stakeholder consultation; develop draft SPR (spring/summer 2005); review and revise to produce a second draft (fall 2005) for final review by stakeholders; and submit the final SPR to the federal Justice Department in fall/winter 2005/06.

With respect to SPR, an audience member asked whether the scope of SPR would include major river crossings. The speaker responded that while the SPR is currently intended for offshore pipelines

and facilities, it may extend to major river crossings depending on the size of a proposed project.

All other questions and comments pertained to the HSE Case approach. One participant, who is familiar with the Safety Case approach taken by regulators in Europe, noted that environmental risks are difficult to quantify. The NEB speaker agreed but added that a qualitative assessment in the HSE is still preferable to no assessment at all. The NEB is seeking better regulation, not perfect regulation – the HSE Case approach will evolve.

The speaker disagreed with an observation that the HSE Case approach appears to change the regulatory scenario. The National Energy Board Act is still in place, the process of obtaining an NEB certificate for a project is still in place. What's new is the proposed approach to identifying and managing risk and hazard. With an HSE Case in place, both the company and regulator gain insight into risk throughout the life cycle of a project.

Submerged Pipeline Regulations, Part II

Brian Nesbitt
Abby Dorval

At the end of Part I, the NEB speaker posed four questions to the audience for consideration and discussion in Part II:

- Is regulation (SPR) the best approach?
- Is the proposed scope appropriate? Should SPR include crossings of lakes and rivers?
- Is the HSE Case approach appropriate?
- What roadblocks, issues or concerns can the stakeholders raise?

The session constituted a lengthy and detailed discussion of these questions, mainly focused on the HSE Case approach.

The Sable Island pipeline was proposed prior to SPR. The audience learned about the regulatory process for this project and how it would have differed using the HSE Case approach. This project triggered both the NEB process and regulatory processes for offshore areas of Nova Scotia. There was a hearing with many players and stakeholders involved; overall the approval was lengthy and difficult. Despite overlapping jurisdictions, the regulators came to agreement and the project was granted a Certificate of Fitness (Canada – Nova Scotia Offshore Petroleum Board) as a result of the process, and the NEB adapted its post-certificate requirements to align with the Certificate of Fitness process.

Had the HSE Case approach been in place, the Sable Island project could have gone differently. The HSE Case could have identified risks and hazards, identified critical elements and the consequences of failure. A review of the HSE Case by the NEB (and other regulators) would in effect constitute verification; it's possible that the company and the NEB would have agreed on a third-party reviewer to ensure objectivity. In the construction phase, having an HSE Case in place would avoid inconsistent field decisions because the HSE Case provides a clear framework for decision-making. The project could have moved forward more easily instead of getting bogged down in complex and prescriptive regulation.

The HSE Case also provides an opportunity to approve a project where no regulations exist. For example, the Georgia Strait Crossing (GSX) pipeline was approved under the *Onshore Pipeline Regulations, 1999*. Had the HSE Case been in place, the NEB could have reviewed and understood the risk evaluation process and moved forward more efficiently.

Is regulation appropriate? Audience members agreed that some form of regulation is required and using the HSE Case appears to make the technical requirement for submitting an application relatively straightforward. HSE and guidance notes would give both the NEB and project proponents more flexibility. It has taken many years to get SPR developed and in place – a trial regulation was drafted in the 1990s but it was not goal-oriented in approach and was sent back to the NEB by the Justice Department for revision; no resources were assigned at the NEB until this year to carry the process forward. Developing guidance notes will involve extensive input from industry and stakeholders.

What specific benefits or concerns arise from the HSE Case approach? An audience member asked whether the HSE Case will be blended with existing *OPR-99*; the speakers confirmed that in time *OPR-99* would incorporate the HSE Case approach, using SPR as a test. SPR happens to present a convenient situation to test and evaluate this proposed new

approach. SPR is complex with respect to regulatory regimes and therefore offers a good test situation – if the HSE Case concept works with SPR, it should translate well to *OPR-99* and other regulations.

Early stakeholder consultations have taken place and indications are that there is support for the HSE Case approach. The NEB will expand its consultation efforts as the project moves forward.

Industry representatives felt it would be valuable to see examples of HSE Case approaches from other jurisdictions. In the United Kingdom (UK), the HSE Case approach started with onshore regulations; regulators sought a better way to deliver on safety and hazardous substances within the chemical industry. The HSE Case approach is now used for pipeline and other facilities in the North Sea. HSE-UK has a website. In Australia, regulators have gained significant insight into using the HSE Case approach as a result of the Longford gas plant fire. HSE documents are public and many may be available online. The NEB Library also has resource materials available on the HSE Case.

A concern was raised about the size and scope of the HSE Case approach. It must be scalable to be appropriate for the project; developing an HSE Case must not be a burden on the company. The process relies on a management system being in place. The HSE Case would build on that management system. Project proponents can use the principle of ALARP to scale a project and its associated HSE Case. ALARP will help to identify acceptable risk versus manageable risk versus unacceptable risk. Understanding the risk and complexity of a project leads to intelligent and appropriate management. The complexity of a given HSE Case will depend on the severity of risks identified.

A participant asked whether the HSE Case would be renewable (e.g., on an annual basis), whether there would be a separate HSE Case developed for each and every project, and whether the NEB would accept as an HSE Case a risk management process that a company may have already developed. The speakers replied that if it appears that a company has process in place to assess and manage hazards and risks, and those processes are used and effective, those processes are in fact the basis for an HSE Case. The NEB would not give specific direction about what to include in an HSE Case document, as this approach is too prescriptive and contrary to goal-oriented regulation. In the U.K., regulators initially required renewal of HSE Cases on a three-year basis but have found this is unnecessarily prescriptive and now request renewals on an as-needed basis.

A project would not be shut down as a result of the NEB's review of a company's HSE Case – this approach is not meant to be punitive, it is meant to manage risk responsibly. A project proponent must demonstrate an internal culture that manages risk. Senior management must have full buy-in to the risk management and HSE Case approaches. Review of the HSE Case may turn up anomalies or flaws in a company's risk management system. The NEB would not necessarily have an approval process but rather subject the company's risk management system to scrutiny. This approach implies acceptance rather than approval. Risk remains with the company, to be managed in a prudent fashion.

The NEB would, however, continue to approve projects within the context of a company's HSE Case documents. Documents that pertain to the proposed project would become public through a hearing process with due consideration of protecting documents that affect security or proprietary information.

The NEB anticipates the HSE Case approach to result in a dialogue. When the NEB asked whether it should involve companies in developing an HSE Case framework, advice from the stakeholders present was that the NEB should come up with a draft framework for discussion and review by industry and stakeholders. Participants noted that the first few HSE Case documents prepared would likely result in considerable dialogue with the NEB, trial and error until the process has been refined. The input of field and frontline workers in industry will be invaluable in identifying specific risks.

At the end of the session, the NEB speakers concluded that no "show stoppers" were identified and it will proceed with the next steps outlined in Part I of the session, with regard to the SPR and the HSE Case approach.

Operations and Maintenance Activities on National Energy Board Act Regulated Pipelines

Lesley Matthews
Ken Paulson

At the December 2003 workshop, the NEB launched a project to clarify the regulatory process companies would be required to follow for the operation and maintenance of Board-regulated pipelines. This session focused on the results of this project to date, including comments received in April and May 2005 on the new draft Operations and Maintenance Requirements and the updated Section 58 Streamlining Order. The speaker noted that the regulations under discussion do not cover electricity transmission lines or pipelines regulated under the *Canada Oil and Gas Operations Act*.

The Operations and Maintenance Requirements are a result of three compelling issues: the NEB is moving toward goal-oriented regulation; companies are requesting more regulatory clarity; and there is a need for respect and protection of landowners' rights. To date the NEB has conducted broad consultation with stakeholders, drafted the Requirements and associated guidance notes for review, updated the Section 58 Streamlining Order and allowed a 30-day period for public comment.

The major change in both the Operations and Maintenance Requirements and Section 58 Streamlining Order will be an increased use of inspection and audits by the NEB.

Specifically, the Operations and Maintenance Requirements will include:

- definitions of "operations and maintenance activities"
- criteria for notification
- opportunity for the NEB to inspect some activities
- other regulatory obligations
- landowner and public consultation and notification programs, which companies must have in place

The Operations and Maintenance Requirements eliminate the requirement for companies to make application to the NEB for routine operations and maintenance activities while respecting and protecting the needs and rights of landowners and the public to be informed of proposed activities. Companies will apply a list of questions and tests to determine whether a given project is either an operations and maintenance activity or eligible for the Section 58 Streamlining Order. The speakers presented flow charts and gave several examples of how to determine whether a project falls under routine operations and maintenance as defined under the draft Requirements, whether the project would be eligible for streamlining under Section 58 of the *National Energy Board Act*, or whether a full application would be required.

An audience member asked whether the requirement for a company to obtain land rights noted in the Operations and Maintenance Requirements apply to all landowners including the Crown. The speakers agreed to clarify this situation but advised that notification requirements contained in the Operations and Maintenance Requirements would likely apply to all landowners including the Crown. Similarly, an audience member asked for clarification on the term "ground disturbance" and at what point would ground disturbance require notification under Operations and Maintenance Requirements; the speakers again resolved to clarify this situation.

Notification requirements generated some discussion. The definition of "third party concerns" was raised; the NEB speaker advised that the company would have to exercise judgment about

who would presumably have an interest in routine operations and maintenance activities and should therefore be notified. The NEB speaker advised company representatives to 'cast a wide net' when informing and notifying the public and landowners, but the test of reasonableness is acceptable to the NEB.

In addition, the notion of "appropriate consultation" can be interpreted differently; a company might interpret this as notification while a landowner may interpret it as consent. The speaker advised that in cases where new land rights are needed to carry out the planned activity then consent is definitely required. It will be up to the company to have a process in place to engage potentially affected parties to resolve concerns and conflicts to the extent possible.

The intent of Operations and Maintenance Requirements is to give appropriate notification of planned activities, to consolidate the requirements for operations and maintenance activities under one umbrella, and to rescind previous guidance notes and replace them with current documents. The speaker received positive feedback from the stakeholders present with regard to clarification that is still needed in the draft Operations and Maintenance Requirements.

Onshore Pipeline Regulations, 1999 – Part I

Scott Gedak

This two-part session initiated stakeholder consultation on the *Onshore Pipeline Regulations, 1999 (OPR-99)*, the rules that apply to federally-regulated pipelines. The speaker asked the audience for a show of hands for all who believed there was room for improvement in these regulations; the majority raised their hands.

To provide context for the presentation and ensuing discussion, the speaker outlined the Government of Canada's expectation that its departments and agencies would explore alternatives to regulations, continuously improve and keep regulations current, and wherever possible, focus on results, leaving flexibility in how to achieve them. With the introduction of Smart Regulation in the 2002 Throne Speech, the government agencies were further encouraged to not only do the right thing, but demonstrate that they were doing so.

Accordingly, the NEB has committed to the ongoing development of a goal-oriented regulatory framework along with the supporting tools to provide clarity in its expectations and the processes themselves. Goal-oriented regulation is a blend of three regulatory approaches: prescriptive, performance, and goal-based regulation. The latter is supported by guidance, a non-mandatory means by which compliance can be achieved, and codes of practice and standards such as CSA Z662 (Canadian Standards Association Standard for Oil and Gas Pipeline Systems CSA Z662). The NEB is also looking for opportunities to harmonize with other jurisdictions and regulators.

After six years of experience with the current *OPR-99*, the speaker said it is time to review and refine the regulation and the guidance notes. This will allow evaluation of the goal-oriented approach and the guidance notes; opportunities to incorporate changes to the regulatory landscape; enhanced alignment with requirements of other federal and provincial departments and agencies; and incorporation of a management system approach. A member of the audience asked whether this would also mean harmonizing requirements within the NEB and the speaker replied that it did; the NEB has created a new department called Policy, Planning and Coordination to allow better sharing of information and increased coordination of efforts within the NEB.

The first step in updating the OPR-99 involves gathering information from stakeholders in June and July, 2005, followed by analyzing the information and drafting amendments in August and September, 2005. Following stakeholder input on draft amendments and subsequent revisions, the revised regulation is anticipated to be submitted to the Department of Justice in late 2005.

An audience member suggested that the timeframe was unrealistic and was further concerned that the regulations and the guidance notes that support the legal requirements of the regulations should be worked on concurrently. The speaker confirmed that the commitment is to make changes to both the regulations and the supporting guidance notes at the same time. By having the guidance notes acceptable to stakeholders before submitting the regulations to the Department of Justice, corresponding changes to both the regulations and guidance notes can be made.

Small groups then discussed questions about management systems and about existing provisions in the regulations.

The two groups discussing management systems considered the following questions:

1. How would a management systems approach for the regulations fit with how companies undertake their day-to-day business?
2. What should a management system approach look like?

There was consensus that management systems are a good fit for today's business culture, which focuses on complete and proper documentation. It was also suggested that it may not necessarily be a management system that is required, but some sort of system appropriate to the company's operations. Due diligence is necessary, regardless of the size or situation of an organization. The *caveat* is that management systems cannot be used for their own sake, but rather should be used to enhance smooth operation of the business.

Concerns were raised about whether the NEB would create one management system for all companies or whether companies could develop their own system based on NEB goals. There needs to be a balance between the prescription of a management system and company autonomy. Management systems must be flexible and designed to meet individual organizations' needs and goals; every company is different, based on whether they are carrying their own products or carrying products for other companies, for example.

Size of the organization would also need to be considered if a management system approach is adopted. Companies vary in size and services – and some companies don't have the resources to support a large management system. A prescriptive regulation may be more suitable for smaller companies.

It would also be important to determine what kind of performance indicators and tools the NEB would use to audit a company's management system and the success of that system, and who would define those performance indicators. The NEB should only be concerned with the results of the management system, and whether the company is doing a good job.

The two groups discussing existing provisions in the regulations considered the following questions:

1. What is working?
2. What is not working and needs attention?
3. What is missing (is there a need to add requirements or guidance)?
4. What are the priorities?

Participants mentioned the NEB's cooperative approach to regulation, saying that if the regulations are going to continue to be open-ended, this approach must be maintained.

The majority of the discussion focused on those areas of the regulations that need improvement. There was confusion about the meaning of the terms "should" and "shall" in the Guidance Notes, and also about Section 53 and 55 of the regulations, which have similar context but can be interpreted differently. In both instances the expressed concern was that depending on interpretation, a company may not comply.

Consistency of glossary definitions – not only in the *OPR-99* but in all regulations – was identified as an area needing improvement. Incident reporting needs to be consistent from regulation to regulation. It was suggested that auditors should be well trained and consistent in their application of the regulations. Improved definition of what is auditable would help in this regard; currently there is no indication of the latitude auditors have to interpret the regulations. If an organization is being audited it would help to have a clear scope of the audit and what it will entail, similar to the Alberta Energy and Utilities Board (EUB) which has a list of audit requirements on their website. Further, a concern was raised that the current auditing process is not necessarily done to the regulations but to the guidance notes. Clearer direction from the guidance notes would help companies more accurately interpret the regulations.

Overlap and contradiction between regulations can create confusion. Concerns were raised by participants that they could be some overlap between regulations such as *OPR-99*, and the proposed Damage Prevention Regulations and Submerged Pipeline Regulations. The *OPR-99* should reference other regulations where applicable, and any contradictions should be identified and eliminated. Components that are similar in each section should be grouped together for simplicity.

After the groups finished their reports and with time still remaining in the session, the speaker introduced the topic for Part II, which took a broader look at improving the *OPR-99*. The goals of the session

were to identify what a Smart Regulation approach to *OPR-99* would look like, and to address the question of the right balance among prescriptive, performance and goal-based requirements for a goal-oriented regulation.

In a Smart Regulation approach, regulations and standards are two of the tools or instruments that could be used. Others include education, information pamphlets and videos, guidance materials, self-, industry- or third-party policing, certificates and orders. Regulations are the instrument of last recourse, and the NEB should be looking at more flexible operation and more opportunities to be responsive. In a goal-oriented approach to regulation, a blend of regulatory styles is used, and different balances can be achieved depending on the blend.

Onshore Pipeline Regulations, 1999 – Part II

Scott Gedak
Kym Hopper-Smith

Discussion topics were introduced in the previous session. Participants were asked to identify additional tools or instruments that could be used under Smart Regulation, in addition to those identified by the speaker in the previous session. The following suggestions were made:

- Consistent performance measures
- A tool for industry to provide feedback to the NEB
- On the application side, develop processes for routine and non-routine applications similar to those used by the EUB, where approval takes a scaled approach (approval in a few days or a week) based on performance. Criteria for fast-track approval are set.
- Establish a help desk to interpret material, especially for smaller, newer companies (the speaker encouraged companies to address a pre-application meeting request to Michel L. Mantha, Secretary of the NEB, to demystify the application process)
- Recognition of similar standards from other authorities
- Training, with sessions on audit, applications and inspections
- Message board where industry people can go online and interact, share ideas, experiences
- Change the NEB code of conduct for staff to facilitate better dialogue with companies
- Definitive timelines for applications and responses similar to service standards of other organizations

On the question of what belongs in the regulation versus other instruments such as standards, it was agreed that most people in industry would prefer to have as much in the standards as possible, particularly technical matters. Regulations need to focus on high-level issues. Meaningful, consistent performance measures will determine how prescriptive the regulations need to be. The main message given by participants was that all companies should follow the regulations, as long as they are consistent for all.

The audience was asked if they believed the NEB should look into an Health Safety and Environment (HSE) Case to base the *OPR-99* on (refer to the notes from the session Submerged Pipeline Regulation Part 1 for a description of the HSE Case). The audience expressed interest in examining this approach; however, this was qualified with the need for more information regarding the HSE Case.

In a goal-oriented approach, selecting the right balance of goal, performance and prescriptive requirements is critical. Selecting the style depends on the nature of what is being regulated. For example, when dealing with a simple and straightforward item, where there are well-established limits and where there is general industry consensus, a prescriptive approach may be appropriate. Also, for smaller companies who may not have the benefit of a full management system, a more prescriptive style may be suitable. However, it is not just company size that should dictate approach; today, large companies don't have any more excess resources available than small companies do and thus may not have more systems in place than the smaller companies. The consensus was that as a regulator, the NEB should identify recognized standards for organizations, then determine whether the standard covers the situation, and if so, whether a more prescriptive approach is needed.

Participants were of the view that the *OPR-99* should focus on goal and performance based requirements. Every company is different and therefore organizations need to have a greater influence into how they are regulated, based on the risk. The Board might ask every organization, regardless of size or age of company, to: set a standard for itself; notify the Board of the baseline; describe the business quantitatively and the associated risks. If the company can demonstrate that it knows the condition of its facility regardless of its age and available records, then the Board can have a range of parameters to help the company meet its regulatory requirements. Make a condition base and then let standards deal with the details.

The NEB has been challenged to have one pipeline regulation for the entire country. While the NEB is working toward harmonization, workshop participants suggested a Memorandum of Understanding (MOU) as an alternative. Common threads already exist; for example, the CSA is the foundation for pipeline regulation.

A member of the audience was curious which regulatory style the NEB sees as needing more work to maintain – prescriptive or goal-based. The speaker replied that while prescriptive regulations are easiest to measure performance against, they don't necessarily best serve companies and the public interest. Goal-based requirements need a lot of knowledge and a strong relationship with stakeholders, but the NEB is committed to becoming as goal-based as possible. This type of regulation is more flexible, even though it costs the NEB in time and resources, and it is not as easy to determine when compliance has been achieved. The speaker also acknowledged that every time the NEB changes regulations or guidance materials, it requires an investment of stakeholder time.

The NEB is currently working with the Treasury Board and Department of Justice to streamline the process to update a bit of the regulations at a time, real time. It currently can take six months to two years to make changes to the regulations, while the guidance notes can be updated almost immediately. Stakeholder feedback is important to the process and while the vast majority of comments and recommendations come from industry, the NEB does broadly consult with other stakeholders and considers their input when finalizing proposed regulations.

Internal Initiatives

Web Site – Making the Leap to E-business

Charlene Gaudet
Shannon Carignan
Elke Meyer

The objectives of the session were to provide an overview of the NEB's web site and its evolution, to gather feedback related to planned enhancement to the web site, and to communicate the Board's new e-business framework.

The initiative called Government On-Line (GOL) launched in 1999 is intended to make Canada the most connected government on-line. It is being driven by the needs and expectations of both citizens and government departments. A 'whole-of-government' approach is being taken, i.e., there should be a uniform look and feel so citizens know they are in a Canadian government web site and are familiar with how to navigate and find what they are looking for.

The Canadian government has won an Accenture Award for best e-government for 2001-05. Accenture, a management consulting and technology services company, studies and reports on trends in the international egovernment landscape. They have awarded the Canadian government the highest ranking for its web site's level of maturity compared to other countries such as the United States and United Kingdom.

Other feedback from Canadian-wide surveys regarding government web sites include:

- 90 percent expect to use the web site in the future
- 81 percent satisfaction rate by existing users
- 76 percent of current users indicate it is easy to find what they are looking for.

These are positive indications that the government is on the right track. The approach has been client-centric so that users have better service, security is maintained, efficiency is improved and users have seamless access, i.e., they can find what they are looking for no matter how they enter the site.

The look of the NEB's web site is governed by the Federal Government's Common Look and Feel guidelines. The point is to achieve a consistent look and feel among all Canadian government web sites.

There are 5,000 documents now on the NEB web site. There are 1,000 visitors each day, with half of them repeat visitors. The Board intends the web site to be a primary communications channel, one that the public can access 24 hours a day, seven days a week. It will be a key tool to inform and engage Canadians, with a proactive orientation.

In the past few years, the following NEB web site related activities have taken place:

- 2002 – launch of e-filing.
- 2003 – web site accessibility testing, e-filing technical conference
- 2004 – enhanced e-filing, web site analysis – letters of comment filed on line, intervenor status, etc., privacy commitments
- 2005 – web site renewal, my account concept developed

The web site is being redesigned to meet the needs and expectations of clients, to improve navigation and launch the new, secure function, called My Account. The Board has heard through research that new users may be a bit intimidated by the site. The Board found that only two percent of 1,100 landowners surveyed used the web site.

The prototype web site was demonstrated. The most significant change relates to the portals – now there are three ways to enter the site, depending

on the user's orientation. There is a portal for industry, for landowners and for the general public. While all users will have access to the same public information, the ways to access the information are a little different for each portal to reflect the users' perspective. Public information will be geared toward workshop, FAQs, educational in information for students, etc. This portal approach enables each of the audiences, and respects them equally.

The institutional blue coloring has also been replaced with more friendly, earth colours. The maple leaf banner was removed – it didn't mean anything to users. It was replaced with images that audiences can associate with.

Other links on the site include:

- Newsroom – news releases, speeches and presentations
- Library – direct link to general information, rules and regulations
- Market watch – energy market assessments and other statistics
- Applications – information on the status, on hearings – gateway into livelink.
- About us – general information, as before, but presented more neatly.
- Also quick links

The audience was asked for feedback on the portal approach from the viewpoint of each of the audiences. The following summarizes the input received.

Portal Feedback

- There is a similarity in the type of information that is needed for the landowner and the public portals. However, there might be a perception that the three groups are being treated differently. That being said, language and jargon must be simplified for landowners and public.
- There is now no special portal for landowners or the public to access the web site – it will be good for them to have their own portal
- Landowners and members of the public don't interact with the NEB on a regular basis unless they are directly affected
- Landowners will be most concerned with projects that affect them and their land directly
- They will want to know what their options are to participate, what are the rules of the game. They should be able to access information on how to participate in hearings.
- The issue of tenants should be addressed up front, so tenants know where they can obtain the information they want. Which portal should they use?
- If landowners enter their postal code, it should bring up projects located nearby. However, the postal code approach would not work for people wanting to learn about projects in other areas, so there should be multiple ways to access information. Landowners should also be able to start from a map of Canada and drill down.
- Users should also be able to do place name searches and search by pipeline, company name, project
- There could also be an option to search alphabetically, by date or by themes, e.g., water protection
- These audiences should be informed that they will only be able to access information about nationally regulated pipelines. Be clear what is not included – perhaps links to the provincial regulators should be provided.
- Will industry be blocked from landowner or public portals or vice versa? There should be transparency up front to indicate that the information provided will be the same, but structured according to the audience's needs
- Watch for colors for people who are color blind
- Balancing public interest statement should be included
- Public rights and duties should be included
- Other information that should be included: who is doing project, how to get involved, summary description of various applications – that information could be provided by applicants, perhaps
- Contact information should be provided, and a contact phone number that connects to a live person

- There should be an Email auto reply – so they know when they will get a response back.
- There should be information on how to navigate
- For projects, there should also be a link to a company page, and cross references from the company page to the NEB
- Consider what is needed for online support – would a 'live' chat line be possible? Immediate two-way communication would be ideal
- Industry needs ready access to filing guidelines, links to regulations, application forms, expected timeframes, service standards, turnaround time, etc. there should be good crosslinks
- Consider FAQs for public and landowner audiences, less frequent users
- Deal with the jargon, perhaps provide embedded definitions for jargon, so the definition will appear when the cursor is held over the word

General comments

- What's new is buried too low. It should be more easily seen
- The search function is not clear. Do members of the public understand how to do a search?
- Will searching in subsites be possible? Is this a challenge?
- There is a separate search function for regulatory documents. Is this confusing? People want the ability to be able to find all applications that affect water crossings, for example.
- When doing a search there should be the option to type it in phonetically (sounds like) members of the public may not always be that accurate in knowing the name of a pipeline.
- There should be multiple routes for same information
- Make sure people know how to submit their concerns about a project
- Menu on the left is easier to navigate
- Need to get there quickly – common concerns and practices, info on regulations

My Account – E-Business

The NEB is developing "My Account" in order to support e-business' transactions that require a high level of security and/or an official electronic record. My Account will be launched in the fall of 2005 as a pilot project. It will at first be limited to filers of commodity forms for propane/butane.

My Account leverages an existing shared government service, called Epass Canada, and will be more secure than most banking web sites. Users will be required to log in to their epass before accessing the NEB's My Account site. An epass is like an online passport to the Federal government services. Over 250,000 epasses have been issued to-date.

The NEB already has electronic filing forms, but until e-filing uses My Account the NEB will still require one paper copy with an official signature to satisfy regulations. My Account users will sign using an epass. This secure electronic signature will result in an official electronic record that will have the same legal standing as a hard copy.

A demonstration was given of epass registration, epass log-in and NEB My Account authentication to provide a general understanding of the user experience and the security requirements. The speaker also demonstrated the look of the My Account set-up page. It will have a similar look and feel to the NEB's main web site page, and indeed, all Canadian government sites. The technical requirements for using an epass were provided in the presentation. An initial NEB survey for the pilot indicated that many companies are compliant.

An industry member wondered whether there would be privacy concerns about sharing information between various federal government departments. Another industry member asked how users will move from other federal department or agency to another. The speaker indicated that the epass is an anonymous and unique credential and that users can apply for as many epasses as they want. It is then the responsibility of each department or agency to determine which individual a given epass represents in their system. This is done by exchanging "shared secrets" that only the department and the individual know. For example, the Canada Revenue Agency will require SIN numbers and date of birth as "shared secrets" to map a given epass to their systems. The shared secrets used by the NEB's My Account to

2. E-business (electronic business) is a broad term to describe the conduct of business on the Internet including servicing customers and collaborating with business partners, not just only buying and selling online (e-commerce).

identify users will vary depending on the level of security required to access a program/service. This approach gives the Board flexibility while meeting security and privacy requirements.

While the same epass can be used with different department, each department must manage its users separately, therefore data sharing between departments is not possible. Also in accordance with federal privacy rules, new systems require a Privacy Impact Assessment that is sent to the Privacy Commissioner.

The speaker noted that in the future, the NEB hopes to delegate administration of industry users by identifying a primary officer in each company who would manage "authorized agents" of that company over time.

Industry asked whether the epass system is intended primarily for industry. The speaker indicated that yes, industry would make the most use of it as it represents the majority of transactions with the NEB.

Industry wondered whether the My Account term would confuse landowners and the public, since they may be familiar with this term from other Internet sites such as Yahoo. Would they all want to set up their own accounts? Perhaps another term should be used.

The speaker indicated that for the first phase of the My Account, implementation will be by invitation only. Industry strongly recommended that My Account be accessed through the industry portal only, to avoid potential confusion. At the same time, to facilitate transparency, the purpose of My Account should be communicated to all users.

Geographic Information Systems & National Pipeline Network Initiatives

Marta Wojnarowska

Maps are a very important communication tool for the NEB, especially on the web site. This session provided an overview of Geographic Information Systems (GIS) at NEB and answered the following questions:

- Why does the NEB need GIS?
- What are the challenges?
- What is the link between GIS and Integrated Compliance?

The Board's GIS initiative began in November 2004. GIS has significantly more capability than other mapping forms, especially the ability to integrate a variety of data – from aerial photos to water depth, soil and geology.

Location is key. The NEB usually wants to know where the facilities are located and where incidents occur, in order to manage its inspections and audits, and to address environmental and safety concerns. GIS is a key enabler of the NEB's new Integrated Compliance initiative.

With GIS, it is possible to display information in a geographical context and it is easier to determine spatial relations, for example, how close is the pipeline to population centres? Is there a nearby water body? GIS can help identify areas of higher risk, based on the number of river crossings, for example, or potential causes for incidents occurring in a specific geographic area. GIS also supports more complex analyses and will help the NEB with application assessments and inspections. For example, an NEB Inspector would be able to review a company's pipeline system and obtain a complete picture of all the facilities in a given area. Areas of concentrated pipeline activities can be identified, as well as environmentally sensitive areas.

The NEB can also use the GIS system with landowners, to show them the location of a proposed project. The map will help focus the discussion. Industry can also benefit from GIS for integrity assessment, risk analysis, corrosion determination, third party damage and emergency response.

One major challenge associated with GIS is cost. Data gathering at the start is a big task and significant resources are required. Pipeline and facility data gathering is perhaps the most costly. In some cases the data exists, but only in hard copy, not in electronic format, and the data may not be up-to-date. There are different sources for the data, causing issues with consistency. Sources for pipeline data include regulators, commercial, national databases and individual operators. There are a variety of issues associated with the data, such as database completeness, Canada-wide coverage, jurisdiction, cost, accuracy and adequate attributes.

Industry was asked to consider what pipeline attributes would be required for the database, such as pipeline name, system name, operator, certificate or order number, commodity, throughput, technical specifications, class location, etc.

The draft attributes presented at the session were selected to support the NEB's new Integrated Compliance initiative that will involve a separate GIS data gathering process. The initiative was launched May 10, with a letter informing companies about the project and requesting contact information. Industry has already been involved through the Canadian Energy Pipeline Association and Canadian Association of Petroleum Producers. Companies will be contacted at a later date to determine what type of data is available, its level of accuracy, completeness and format. The

implementation of the initiative will begin with a few pilot companies to help determine what can be delivered, the associated cost and technical challenges.

Board staff was asked how it defined 'current' with regards to data. The speakers indicated that the NEB will use a commercial data layer developed by Geomatics Data Management Inc. This layer is not fully complete.

Board staff was asked whether the GIS system would include only NEB-regulated facilities. Board staff indicated that it was building a system for regulated pipelines initially, but its long-term vision would be to develop a complete pipeline network, if there is support for that.

An industry participant asked about the security of the data. The initial plan is for the information to only be used by the NEB, but there would be security for both data and access. As well, company confidentiality will be addressed before information is shared. Industry will be consulted about what would or could be accessible to the public. The NEB appreciates that the pipeline system constitutes critical infrastructure. The NEB will need to ensure the security of its servers, and industry indicated that security would be addressed on its side as well.

An industry member wondered whether a cost benefit analysis had been conducted for the project. Will the NEB realize any cost savings or improved efficiency? Board staff indicated that it has been considering GIS for some time. A decision to go forward was postponed 18 months ago when the NEB decided to carry out additional analysis. On the basis of the new business case, the NEB decided to go ahead. Another factor in the decision was that the technology is ready now and is web-based. There were no specific savings amounts that the NEB could share, but improved quality of service was described as a major benefit. Besides pipelines, there are over 700 facilities regulated by the NEB, and in some cases, the location of them is not known. It will be very good for inspectors to be able to view a complete geographic picture to identify all nearby facilities for any given pipeline project.

National Pipeline Mapping System (NPMS)

James Obrigewitch

The National Pipeline Mapping System (NPMS) is a national Geographic Information Systems (GIS) database created by the United States Department of Transport, Office of Pipeline Safety (OPS), along with other federal and state agencies. The NPMS has been in operation since 1999. It consolidates information from operators, provided originally on a voluntary basis, but mandatory as of 2002. The database is over 99 percent complete and includes over 330,000 miles of natural gas transmission lines and 116,000 miles of hazardous liquid trunk lines.

OPS, which has regulatory oversight of the facilities but not the application process, uses the NPMS for the following purposes:

- Decision support tool
- Emergency response
- Inspection planning
- Protection of people
- Protection of environment
- Regulatory compliance

The system has not been widely available to the public since 9/11, and operators can only download their own data to use in their own GIS. The public can find out the operators in their area and how to contact them, and other regulatory agencies can access pipelines locations.

The implementation process for NPMS was reviewed, along with the standards and specific system attributes that are collected. The level of accuracy for pipelines in the NPMS is ± 500 feet. Operators are required to submit:

- geospatial information
- system name
- operator
- commodity
- interstate flag
- subsystem name
- pipeline ID
- diameter
- status code
- revision code
- quality code

The NEB supports the creation of a Canadian version of the NPMS and expects benefits such as efficiencies, shared systems and costs. OPS and others have proved the potential for these benefits. Natural Resources Canada's (NRCan) experience in building a GIS road network has given it the ability to lead the building of a pipeline GIS. But the NEB understands that it can't be built overnight and that significant consultation will be required. Its next steps are to create a draft preliminary assessment for NRCan's consideration in September 2005.

Industry asked about a sister program, High Consequence Area (HCA). The speaker responded that the NEB is acquiring environmental and cultural data, but has not yet determined if zones will be identified.

Participants noted that high consequence areas such as navigable waterways, drinking water, etc. should be included in the GIS database. The NEB speaker

noted that a national water layer, like the road network, is being built by NRCan and will soon be available to the public.

The speaker was asked about public access to the Canadian database. Are there any guidelines post 9/11 about what data and what level of detail would be accessible to the public? The speaker noted that is an area that will require analysis. The speaker indicated no awareness of any specific legislation to deal with this type of security issue, although there is a desire to provide some degree of access to the public, as long as security and confidentiality are not compromised.

The speaker noted that there is a web site portal for the public to log on to and access the national road network at no charge. The water layer will also soon be available at no charge. Pipelines, however, have special security aspects and may not follow the same model. In the U.S., some portions of pipeline can be accessed by the public.

It was noted that the situation was ironic: on the one hand, the public should not know where the pipelines are located for security reasons, but pipeline locations are all visibly signed -- landowners and the public need to know their location for safety reasons. The speaker indicated that security risk would be higher with aggregated pipeline information, rather than individual line segments. The speaker also noted that having a clear and visible right-of-way is still a priority for the public, and that there will need to address how easy it will be for the public to access information, how much information will be amalgamated, and whether it will be publicly available over the Internet, a higher risk than a public request for hard copies of information.

Industry noted that it may be reluctant to cooperate for a number of reasons, including security, confidentiality, as well as the cost and effort to supply the data. The project will need to be 'sold' to industry and its benefits promoted. Will industry be able to acquire data through the GIS, for example, HCA? If industry can save its own data gathering costs, companies would be more willing to share proprietary information. The speaker indicated that streamlined access to the data could be provided as a benefit and that other organizations would benefit as well, such as First Call groups.

National Transportation Network

Marcel Sabourin, Natural Resources Canada (NRCan)

A presentation by NRCan described the department's major Geographic Information Systems (GIS) restructuring. The objective is to provide users with an accurate, single source, up-to-date national network in partnership with federal, provincial and territorial stakeholders. The system will allow users and stakeholders to develop uniform and relevant business applications as well as reduce redundancy and create an environment of synergy. NRCan is currently building the National Road Network and National Hydrographic Network. Under investigation are the national pipeline network, as well as rail and electric power transmission networks.

NRCan listed the key characteristics associated with the networks:

- Unique: a common core provided by those closest to the source
- Homogeneous: shared understanding, vocabulary
- Shared: data is available at no cost and without restriction via Internet
- Maintained: data must be maintained, regularly updated
- Expandable: network must be expandable. Each organization can add its own business layers and attributes

It was explained that there are two types of network models: segmented and linear referencing system (LRS). These two systems can provide the same content, but they are managed differently. The LRS system has the ability to include all the desired information without segmentation. The segmentation required for each layer in the segmented model would ultimately result in too many very small segments.

National road network features and attributes were reviewed. Partnership agreements are being struck with each province, allowing for staged implementation. The road network currently has 1.1 million km mapped. In addition to the road data, the National Topographic Database pipeline currently maps 42,277 km of pipeline, along with some facility and valve locations, but no attribute information.

The speaker was asked if there had been any interest from other parties such as the electric or rail industry. He noted that other groups have data holdings, funds and commitments for this type of project. Rail is the next most advanced; the electrical industry is not yet as active.

Does the project use international standards such as the International Organization for Standardization (ISO), asked another participant. Yes, the speaker indicated, however only components that apply to a Canadian context are used; others are not suitable.

Another participant pointed out the importance of addressing local issues. The speaker noted that there is a hierarchy in terms of modeling – nationally, everyone must have free access to data. The framework only provides a spatial reference; the data depends on needs. The United States has adopted the Canadian model as well as some ISO guidelines in its national road network model.

Quality Management System and Integrated Compliance Project

Teresa de Grosbois
Kevin Gerla

The NEB is working on two related internal projects:

1. the implementation of a quality management system (QMS) designed to the ISO 9001-2000 standard; and
2. an Integrated Compliance (IC) initiative to develop a system of inter-connected processes to illustrate NEB application activities and ensure compliance with the National Energy Board Act and Regulations.

The QMS objectives are as follows:

- To improve the effectiveness of the NEB's operations
- To provide a foundation for Smart Regulation

The anticipated outcomes of QMS are:

- The NEB operates smarter and more effectively
- The NEB focuses on the greatest risks
- Companies with a good compliance history should see a reduction in regulatory oversight.

This initiative is taking place on an NEB-wide scale with design largely complete and implementation beginning. Finalizing the design will ensure the interconnectivity of NEB processes, where the output of one process (e.g., inspection) becomes the input of another process (e.g., audit). The IC project is primarily aimed at providing this "connectivity".

IC is one of the first NEB-initiatives to utilize QMS principles. The objective of the IC project is to provide a more effective and transparent compliance program, with respect to safety, security, environment and finance. IC will create a more formal process of prioritization and integration of all regulatory oversight processes. Two of the Board's major business units will be affected: Operations and Applications. These two units need to integrate more and share their intelligence.

This project will make the NEB's compliance work more consistent and transparent. Companies with a good performance record should experience less regulatory oversight. The project will also create an opportunity for industry to learn from trends, and determine the qualities associated with good performance.

Some specific requirements need to be built into the IC project. There is a need for integrated knowledge base, an understanding of risk events and causal factors as well as understanding the impacts of regulatory actions. There is also a need for a system to manage and analyze data, as well as a method to evaluate the effectiveness of the actions taken by the NEB, industry and other stakeholders

Two very important tools will be developed to support the IC project:

- A compliance prioritization tool (which will utilize facility data, company performance, receptor information)
- Influence diagrams (cause and effect diagrams), indicating the elements that lead to potential risk events

These tools are in development, and industry input would be helpful. The areas of focus are: safety, security, physical environment, human environment, integrity, emergency management and finance. Participants were asked how industry sees itself helping to develop these tools and whether there would be an interest in providing input.

A participant noted that 'Smart Regulation' must involve the implementation of good ideas. The speaker noted that the IC project is about implementation, not just words. The objective of the project is to focus on what matters and use regulatory resources in the most effective way and at the appropriate time.

The speaker was asked about the prioritization tool and what input from industry would be helpful. The speaker noted that the NEB's decisions about compliance are based on the knowledge and experience obtained from its staff. Currently, compliance activities are determined on an informal basis. The tool will semi-quantify regulated facilities; for example, a sour gas facility may rank higher on the scale than a sweet gas facility.

With respect to company performance, it may be more challenging to determine what indicators will be used. How do you judge companies: by the number of incidents? The NEB could use that as a start, but seeks input from companies on what type of indicators should be used, for example, facilities in Class 4 locations or in pristine areas or national parks may be higher in the risk chain. Geographic Information Systems information may be helpful in determining receptors and helping shape that tool.

The speaker noted that the NEB is not developing a detailed risk model that would duplicate the company's risk models. The compliance prioritization model is only intended to guide the NEB's activities.

A participant noted that the NEB already has company performance information – integrity performance indicators were described in another session. Some answers may already be available. The speaker responded that the Board needs to integrate its activities better and that those indicators should be looked at more closely to determine how they will influence compliance.

Another participant wondered how the IC project ties into QMS, noting that QMS is at the design stage, and that IC is at the implementation stage. The QMS speaker noted that those stages are not discrete and that there is some overlap. To implement a QMS, you need to start with repeatable and systematic process. The design of the IC project will incorporate the QMS principles. Everything will be linked together.

The IC speaker was asked about facility data, specifically about what the NEB would need and what it does not have regarding facility data. The speaker noted that the NEB needs knowledge about the facilities it regulates. It is challenging to track corporate changes, for example, merging, buying and selling of companies. The NEB does not always receive that information, and a system to maintain the knowledge base is needed. It would be possible to obtain the information by digging through paper files, but that would not be ideal. An electronic system would be preferable and if companies can provide that information electronically, that would be preferred.

A participant asked whether the NEB has talked to other regulators in Canada to see if they have any tools or compliance systems similar to what the NEB is trying to implement. It would be helpful to industry for regulators to be consistent. The speaker indicated that currently the NEB is aware that the Alberta Energy and Utilities Board and the Oil and Gas Commission in British Columbia are making efforts to implement similar tools. In the United States, the Department of Transport's Office of Pipeline Safety is also developing a similar compliance system. The NEB will further engage with other regulators to learn from each other and potentially address consistency issues.

Another participant asked how much of the data would be publicly available. The speaker indicated that the NEB is aware of confidentiality issues regarding the data and seeks input from industry on what should be kept proprietary. Lawyers will also need to analyze the information. The speaker pointed out that the majority of information that would be collected and used for the tools is already available as a Board record in hard copy format.

Environmental Protection

Environmental Hot Topics

Alison Farrand

This session provided the kick-off for the Environmental stream of the workshop, providing an opportunity for participants to share and discuss perspectives on challenging environmental issues, as per below. Participants brainstormed and prioritized 'hot' environmental issues. The highest priority issues are identified below with an asterisk and some of the discussion on those priorities is included.

Planning Issues

- Desire for more clarity about assessment requirements – not just NEB, also others such as Canadian Environmental Assessment Agency (CEAA)
    - *Canadian Environmental Assessment Act (CEA Act)* and offshore
- Roles and responsibilities of regulatory agencies
    - Provincial & federal jurisdiction and harmonization
    - Agency coordination
- Species at risk – scope and requirements
- Project scope definition
- Routing
- Justification for meeting or not meeting requirements
- Predictable process timelines
- Mitigation and compensation of cumulative effects
- How to prove no effect
- Completeness of application
- Traditional knowledge – integration and application
- Greenhouse gases
- Spatial and temporal boundaries
- Assessing contingency plans
- Determination of local study area
- Issues scoping
- Stakeholder consultation for Environmental and Socio-economic Assessment (ESA)
- 90 day approval for *CEA Act*
- Growing role of third level of government
- Assessing alternative or new mitigation measures
- Social impact assessment scope – developed areas
- Local economic development and business growth – co-operation with government (federal and provincial)
- Scope of cumulative effects – limits of further studies, purpose and rationale

Participants noted that there are problems associated with definitions of terms related to cumulative effects and that not all regulatory requirements are accepted by all stakeholders. It is not clear how or where to set limits or boundaries. Everyone has varying ideas of these boundaries. For example, a cumulative effects study of the oil sands in Fort McMurray could draw a circle as far away as Calgary, since that city has been directly affected by oil sands development and could be included in a cumulative effects study.

While public consultation could help determine some of those boundaries in project-specific cases, it was noted that there is already a defined standard of practice that is reflected in policy and guidelines.

There needs to be a better definition of the limits of what is required. How far back in time, how far out in space should the assessment address? An analysis of existing land use might be helpful. It was clear that case-by-case evaluation is needed.

Participants also indicated that the regulator should define a set terms of reference for the Environmental Impact Assessment (EIA), and land use planning agencies should set thresholds. With regard to maximum disturbance review criteria, industry wondered whether it holds the responsibility to gather all the baseline data. Rather, shouldn't it be the government's responsibility, since government is responsible for the wider public interest? But there doesn't appear to be the political will or resources to undertake this work.

It was also noted that industry often pushes the limits and needs limits set. It should be up to the applicant to make its case and convince stakeholders of the scope of the assessment.

Construction

- Soil conservation
  - want to do right thing – but constraints, e.g., work site restrictions
  - when to do 3-lift and when not to
  - how much to strip
  - maintenance - impact of stripping vs. no stripping
- Timing windows
- Migratory birds
- Seasonality
- Rare plants surveys
- Unclear regulations
- Invasive plants – cleaning equipment
- New issues in water testing
- Slope stability and permafrost – new issues
- Impacts to wildlife
- Route selection
- *Watercourse crossings
  - identify contingencies
  - access to water for testing, frac-outs, water contamination issues
  - watercourse crossing method selection
  - sets of rules can't be applied across the board – different jurisdictions

There were a number of issues related to watercourse crossings during construction, such as permitting issues, the lack of room for error, getting stuck in process loops, and timing windows. Industry needs to negotiate with regulators on sensitivity and timing windows; it would be helpful to know what they are in advance, because they affect construction timing, which is already restricted due to seasonal and weather related reasons. The possibility of extending timing windows in cases of low risk was suggested.

Industry wondered whether fish studies, for example, need to be undertaken for every single watercourse. Are there times when a desktop exercise is possible? The timing of fish studies is also a problem. They must take place in the summer, when construction would also take place. This sometimes results in significant project delays.

Sediment containment was also discussed. It is difficult to contain sediment, and there is always leakage. The only solution appears to be to minimize the amount of time in the water. Nephelometric Turbidity Unit (NTU) guidelines are not based on short-term construction and the goals are not realistic.

It was suggested that it was important to maintain flexibility about crossing methods, evaluate the risk of each crossing method, and change the method if needed.

Operations

- Monitoring – monitoring for effects assessment vs. monitoring for regulatory compliance
- Regulatory expectations
- Vegetation monitoring
- Right-of-way responsibilities when there are multiple companies
- When to do or not do brush control
- Wildlife issues, especially in northern Alberta
- Emergency response planning – sour gas emissions, controls
- Risk aversion of NEB – very conservative

- Companies can't speak to an NEB technical specialist directly
- Uncertainty about how the NEB makes decisions – companies sometimes don't understand based on the science why an application is rejected
- *Jurisdictional issues – overlap between federal and provincial responsibilities – for example, the provincial government issued a permit for groundwater injection and found the risk assessment acceptable. The NEB did not.

Industry indicated that overlap between government agencies was the most significant issue related to environmental issues during operation. There is duplication of regulatory oversight of the same issues by the NEB and the provincial regulator, with differences in risk tolerance and no consensus between the two agencies. Perhaps each agency is considering different factors. It is not clear who is responsible for spills, air emissions, water emissions, since the provincial government is responsible for watersheds and airsheds.

Industry also expressed a similar concern at the application stage, noting how difficult it is to get all the regulators sitting down in the same room. There are regulators who provide workshops and guidance, but the efforts are disjointed. There is no forum for sharing interjurisdictional concerns. There could be web sites, working groups, and other harmonization efforts undertaken. It is critical that all stakeholders gather in a room together for the application process.

Abandonment

- No focus on abandonment by industry at present – it's a fairly new concept and there has not been much practice
- Need to develop a better regulatory framework
- How to deal with contamination
- Lots of changes
- Liability is a big issue
  - When has a company done enough? Does it ever end?
  - Liabilities/bonds/securities
- Changing regulatory framework
- Expectations are changing
- Public safety over long term
- Approvals – companies don't want to sign a blank check – need clarity/certainty
- Why is a second application needed? Abandonment is simply a different operation
- Should the regulator allow increased tolls to shippers for future abandonment costs?
- When does a company have to abandon and undertake final reclamation? Not clear in regulations
- Old sites with no monitoring history
  - New projects should have requirements for monitoring to provide information when it is time to abandon (links to Geographic Information Systems – need for current and new projects)
- *What does it mean? Removal of facilities? What can be kept in place? How much can or must be removed?

There was not a strong interest from industry in discussing the abandonment issue; perhaps it is too far down the road. Industry is not clear about what is required for appropriate abandonment.

Effective Environmental Protection Plans (EPP)

Tracy Young
Marc Pauzé

The purpose of the session was to share ideas about how to improve the effectiveness of an EPP. An EPP is a tool to communicate a company's environmental procedures, project specific commitments and mitigation measures. It should be in a clear and easy-to-read format and contain a complete review of all the planned environmental protection and mitigation measures. It should provide an easy reference document for NEB and field staff. Board staff encourages the submission of an EPP with an application.

Board staff noted that the main issues associated with EPPs in the past are:

- Unrealistic commitments – mitigations that are not feasible or practical
- Lack of site specific measures – too vague
- Poor format – the document is too difficult to use

Board staff described the principles behind a good EPP, and industry indicated which elements it believed were critical for a good EPP (table 1).

Other suggestions by industry related to how the EPP should be structured or formatted:

- Include regulatory contacts
- Facilities vs pipeline EPP, should there be a difference in the EPPs?
- Include more visual aids
- Make sure document is easily trackable
- Watch construction 'language'
- Use more photos and diagrams
- Integrate contingency plans within each section of the EPP
- Link EPP to construction/alignment sheets
- Consider breaking the plan into project phases
- Consider a generic template

Board staff provided a handout of a portion of an EPP that demonstrated a good tabular method to present mitigations for each segment. This was a power line application but could be applied in the pipeline industry. This format would work well for construction crews.

Board staff indicated that industry had supplied a number of suggestions related to mitigation measures, but that the rest of the EPP was important as well, especially the need to state the goals and list the options.

Industry noted that in the past, the EPP was used specifically for mitigation measures, and that other elements were addressed in the company's environment management plan. Industry wanted to know if those two documents should now be combined. The speakers indicated that the EPP should be project-specific as well as a stand-alone document that can be used as a reference in the field. The environmental management plan should be considered a more general document.

Board staff added that the two documents do not necessarily need to be integrated. An environmental management plan requires a significant commitment, and the plan may constitute multiple volumes. This would be much more information than would be needed by field personnel. The EPP should constitute a quick and easy reference

Table 1

NEB's Criteria for a Good EPP	Industry Elements for a Good EPP
1. Identify specific goals, e.g., restore vegetation to preconstruction condition	Reclamation goals outlined
2. Explain practices and procedures, e.g., topsoil will be stripped and conserved and right-of-way reseeded.	Practical vs non-practical Integration of traditional/local knowledge Archeological site SARA species posters – site specific Constraint mapping Access Environmental orientation for construction crew Communications strategy plan Water protection/quality Land reclamation Key list of issues up front How a company minimizes its environmental effects in doing the job, e.g., spill kits for fueling, spill management plan, refuse and pest management, traffic to and from site, track record
3. Provide criteria to evaluate success, especially reclamation and any new mitigation measures	Improve terms of reference
4. Provide flexibility by covering all options for practices and procedures that may be used, for example varying the seed mix depending on site specific requirements	Flexible Criteria for alternate implementation
5. Provide criteria for the company's decision making process, e.g., when it would use a faster growing seed mix	Clear triggers for implementing contingency plans
6. Assign accountabilities and responsibilities	Stop work authority defined Training Assign owner vs contractor responsibilities Brief description of roles and responsibilities Provide clear decision protocol for applying mitigation measures

for people in the field, with identifiable goals and associated success criteria. Inspections would be an important tool.

When the speakers asked about success criteria, industry responded that there should be caution associated with the use of success criteria. In some cases, the completed work constitutes the success criteria.

The speakers emphasized the importance of the knowledge being transferable. It was noted that environmental inspectors may take on the role of being human EPPs. Workers in the field may not be able to follow an EPP in written form, so the inspectors play an important communications role. The inspector should know the binder intimately and where to find specific information. Individuals should be a source of knowledge, rather than relying on binders in the back of the truck.

Board staff asked the audience how much or how often companies go back and measure the success of their EPP. Is there an evaluation process in place? Is there any communication that goes back to consultants to indicate what worked and what did not? One industry representative replied that evaluation is often communicated through word of mouth, or is sometimes captured in documentation in different places, depending on the size of project.

Another industry member indicated that it holds close-out meetings with environmental inspectors to identify what worked and what didn't after construction is completed. Their consultants revise the EPP so that all the feedback is captured. For its post construction monitoring program, goals are clearly delineated.

Filing Manual and Environmental Assessment

Marcus Eyre

A new pipeline filing manual (FM) was released by the NEB about a year ago. It provides guidance about what the NEB expects in an application. A large portion of the audience indicated they had used the FM in past year. NEB staff sought opportunities for questions and feedback, primarily on Chapter 4.1, 4.2 and Guide A.2 of the FM, addressing the environmental assessment (EA) process and biophysical considerations. The NEB intends to update the FM as needed to enhance its usefulness. One the expectations is that FM users will experience fewer information requests (IRs).

Background on the FM

- The new manual replaced the 1995 Guidelines for Filing Requirements
- Provides more direction – so applicant will know what to file and how much information to provide. Applicants need to read through the material to educate themselves
- The FM provides an updated, goal-oriented approach – what information is required under what circumstances and with what level of detail – the focus is on important relevant elements and effects
- New features include:
  - context of EA review process
  - guidance on scoping
  - consultation with federal authorities
  - guidance on level of detail
  - trigger table

The speaker reviewed the structure of the FM and summarized the key sections of the FM that relate to environmental protection and the EA process.

Two new filing manuals are under development: one for international power lines and one to meet the *Canada Oil and Gas Operations Act (COGOA)* North of 60 requirements.

The following potential areas for improvement were identified:

- Table A-1 (p 4A-19) – Summary of Filing Requirements
- Ch. 4.2.2 alternatives
- Terms and concepts, e.g., Environmental and Socio-economic Assessment, elements vs Valued Socio-cultural Components
- Section A.2.3 scoping – roles, level of detail
- Subsections within A.2.5, effects assessment
- Tables A-3 and A-4, information requirements for specific biophysical issues
- Additional information gray boxes – additional guidance, not necessarily additional requirements

The speaker was asked about the checklist at the back of the FM; was it a summary of all sections? The speaker indicated that yes, it is a complete checklist for the user's own reference and internal use. Although the checklist is not required to be completed and filed, it could be submitted as a concordance table.

The following feedback on the filing manual was provided:

- Would like additional guidance on spatial and temporal boundaries (e.g., page 4A-35) for cumulative effects assessment on page 4A-41

- Page 4A-29 dealing with study areas, should the study area and effects assessment area be the same? How big should these areas be?
- Would like more direction in scoping. What comes first with cumulative effects assessment? Do you select the projects in the vicinity – or do you determine the area first? Include more examples and clarity regarding how to scope. How big a scope? How would that fit with Canadian Environmental Assessment Agency (CEAA), other agencies with interests? What are those other interests?
- Requested more definitions and an indication of where other responsible authorities enter into the mix, for consultation
- Concern about how to make the FM 'work'. It was noted that some communities or individuals may have interests that are at odds with addressing environmental issues. In these cases, is the manual flexible enough to allow for project approval, and not result in multiple IRs suggesting that the scope is not right.
- The filtering questions in Table A-2 were considered too vague. Language such as 'at a minimum' and 'where appropriate' is not clear. Where it indicates detailed information is required, how much detail? For water quality, should surveys by fisheries specialists be undertaken or is desktop analysis sufficient?
- More guidance on how much justification would be required as indicated in the gray box on page 4A-33. It is too open to interpretation.
- The evidence of public concern cited on the bottom of P. 4A-30 was also considered too vague. Would a single landowner constitute evidence of public concern? What about Environmental Non-governmental Organizations?
- There was a general desire for more information on the NEB's expectation regarding the routing for a new facility (Greenfield or larger pipe). What level of detail is needed? Should the general or specific route be described? A schematic should be included in the FM on the NEB's expected process to deal with broader or wider corridors.
- There should not be any unique NEB requirements, and all requirements should be consistent with CEAA.
- While a special manual to address North of 60 issues is being developed, some issues related to COGOA were raised by participants, such as clarifying the role of the NEB, how to address land claims, and A-5 should address traditional lands approaches and northern requirements such as potable water.
- It was noted that the Voluntary Challenge Registries and web site link in Table A-4, page 4A-53 has changed.
- The reference to Environment Canada's 'keeping already clean areas clean' on page 4A-52 is too vague. What is clean? Would that mean zero construction?
- It was noted that in Guide G on deactivation there is not enough detail; it just creates a circular loop back to Guide A, section A.2.
- Regarding watercourse crossings, Department of Fisheries and Oceans Canada (DFO) should be consulted to understand their requirements and what will trigger them. If the DFO is not identified as a responsible authority it may still provide technical expertise to the NEB. There needs to be a decision-making process for crossing techniques. If you apply for a certain crossing and it 'ails, do you have a contingency method of crossing?
- In Table A-4 on fish and fish habitat, the bullets step through the level of the information required. There should be more information provided on the consultation process, including with DFO.
- The terminology used in the manual is not the same as used by other agencies. There should be more attempt to be consistent, but at the least, clear definitions should be provided
- The FM should make it clearer that there are exceptions, depending on region.

CPEC: What's Up?

Karen Blank

The Canadian Pipeline Environment Committee (CPEC) is a forum for sharing information and providing mutual assistance. It was initiated in 2001.

Members include:

- Canadian Association of Petroleum Producers
- Canadian Energy Pipeline Association
- National Energy Board
- Environment Canada
- Canadian Environmental Assessment Agency
- Fisheries and Oceans Canada
- Provincial/territorial government/agencies
- Indian and Northern Affairs Canada

The committee has identified issues and prioritized them. Its primary activity in 2003-04 was to publish the booklet, "The Pipeline Industry and the Migratory Birds Convention Act". This was identified as a significant emerging issue. The group is looking at watercourse crossings and reclamation. Are national criteria needed? Industry was asked if it had other issues that should be addressed. There was no comment.

Environmental Performance Indicators (EPIs)

Katherine Roblin

EPIs are measures of performance of an organization or sector with respect to protection of the environment. EPIs may be compared against previous performance (for assessment of trends), peer performance or against pre-set targets.

There are two different kinds of indicators: leading and lagging. Lagging indicators are the most common and are a measure of outcome, for example, the number or volume of oil leaks. Lagging indicators only tell you if there is a problem after the fact. Leading indicators measure effort to ensure positive environmental outcomes, or may be intermediate measures or precursors of positive or negative outcomes. An example of a leading indicator could be frequency of right-of-way inspections or hours of environmental training. Leading indicators can help forecast where environmental problems may occur.

The NEB collects EPIs to report to government and the public. The NEB has made a commitment to the Canadian government to expand public reporting to include pipeline integrity and EPIs. NEB EPIs should allow companies to benchmark their performance against their peers. They should also help the NEB adjust its programs and allocate its resources to respond to trends. The speaker also noted that the public has access to the data to encourage informed public perception of pipeline environmental effects.

A good EPI is:

- Measurable
- Meaningful
- Useful
- Comparable
- Derived from generally available data

The NEB developed the following Safety Performance Indicators (SPIs) in 1999:

- Fatalities
- Ruptures
- Injury frequencies
- Liquid releases (spills)
- Gas releases
- Unauthorized activities on the right-of-way

In March 2005 these SPIs were reorganized so that liquid releases (number, frequency and volumes) and gas releases (number and frequency) are now categorized as EPIs. Liquid and gas release data were reviewed, followed by a discussion. Industry was asked whether this type of data provides a good, high-level indication of performance. How could they be improved?

Industry commented that small liquid spills data is collected on a voluntary basis only, so how can the NEB determine if there is trend? The speaker indicated that even though the reporting is voluntary, the companies reporting are mostly NEB-regulated companies, and that volumes are a reasonable representation, compared to numbers of events.

Industry asked whether members of public ever ask for this information. Have there been presentations to the public? What has been public response? The speaker noted that it has given presentations in industry workshops.

Industry also wanted to know if the data provides a high level picture. Other organizations are

developing or have developed their own EPIs and there is a danger in comparisons; apples should be compared to apples, if you use other reference organizations. The speaker indicated that it was understood that the data isn't comparable.

The Board was asked whether it had considered other variables such as pipeline age and integrity factors. The speaker indicated that those had not been considered so far.

The Board was asked whether other agencies have voluntary or compulsory reporting. The Board speaker indicated that United States Department of Transport Office of Pipeline Safety (OPS) reporting is mandatory; through the European Gas Pipeline Incident Group (EGIG), companies report on voluntary basis.

Are spills a valid indicator to measure, wondered one industry member. As well, perhaps it is not a good idea to group operations with construction activity, and mandatory with voluntary data. The meaningfulness of the data may be lost.

Another participant noted that to measure commodity spills, you need to look at the efficiency and integrity of the pipelines. Companies have their own indicators and collect their own data. He noted the redundancy of the Board expanding what they are doing now and questioned its value. Companies can ensure they are measuring apples with apples. The speaker indicated that the Board recognized the limitations of its program.

The speaker was asked whether spills had to be reported under the *National Energy Board Act*. The speaker responded that, yes, numbers were reported under the *National Energy Board Act*, but only for hydrocarbon spills. North of 60 spills are reported separately under the *Canada Oil and Gas Operations Act*.

Other organizations with EPI or other reporting initiatives include:

- Canadian Energy Pipeline Association (CEPA) is developing EPIs and will be gathering environmental data
- Canadian Association of Petroleum Producers (CAPP) has a comprehensive stewardship program with extensive safety and environmental benchmarking that is mandatory for full members since 2003
- Benchmarking data under CAPP includes Greenhouse Gases (GHG), sulphur recovery and SO_2 emissions, benzene emissions, flaring and venting, non-pipeline spills, pipeline releases, abandonment and reclamation
- Voluntary Challenge Registries and the Canadian Standards Association GHG Registries provide voluntary reporting of GHG emissions and emission intensity, year to year, target setting, education, training and awareness
- National Pollutant Release Inventory (NPRI) for facility specific data

Participants were asked to respond to the following questions during group discussions:

1. Who are other data collectors? Is there any value in comparing the NEB data with reference organizations?
2. Can companies extract NEB-regulated pipeline data from the rest of their data? Is there any value in extracting data from the full dataset for NEB?
3. What new EPIs would be the most useful/ meaningful for NEB-regulated facilities?

The following responses were gathered.

Other Data Collectors

- British Columbia Water Lands and Air Protection, also Department of Fisheries and Oceans Canada, for spill reporting
- Environment Canada held a workshop
- Each province has its own reporting
- Provincial organizations are also reporting spills, compare with Transportation Safety Board and ENR
- Compare regulatory regime/practice when comparing other organizations
- Georgia Strait air emissions reporting requirements, insurance companies, World Council on Sustainability, NAFTA
- Other reports, such as transportation and safety boards, CEPA, Interstate Natural Gas Association (like CEPA in the United States)
- Consider Environmental Non-governmental Organizations with report cards – The World Wildlife Fund and the Sierra Club

- The Alberta Energy and Utilities Board asks for GHG data
- There are also Statistics Canada requirements
- NPRI – lots of NEB companies report
- CAPP/CEPA are good – redundant?

Extraction

- There is already an effort, since spills are reported internally
- There is no interest or value in separating NEB pipe from other pipe
- Difficulty in extracting data would depend on what you are looking for, ecological indicators might be more difficult to extract
- Companies compare their own data to themselves for the purpose of continuous improvement. That has value in itself.

New EPIs

- Not substances, but nature of regulation and the need to report
- Compulsory reporting would be the most meaningful, compared to voluntary
- In Alberta there are strong enforcement consequences, so for Alberta companies it is often better to report, whether it is a reportable spill or not. This type of behavior may skew the data. Regulators should filter out non-reportable data.
- Compare different indicators – number of spills and total volumes
- How the information will be used is very important
- May need to separate out construction
- Non-reportable spills are not represented in the data
- It may be a better EPI to indicate how the spill was handled
- More variables should be built in
- Wildlife indicators
- How much new cut
- Loss of habitat
- Impacts to forest land
- Size of right-of-way
- Land use and land capability indicators
- Data should already be collected; it would be too much work otherwise
- Data must be useful
- The EPIs should go beyond spills and wildlife land usage, ecological indicators, biodiversity, evaluating mitigation, project specific revegetation, energy efficiency
- Don't collect data because other regulators are doing it
- GHG is relevant but redundant

Industry also made the following observations:

- There may be possible duplication of data when there is joint ownership of a system
- If data for new EPIs is not already being collected, a significant effort would be involved
- Duplicating reporting has little value
- Data might highlight the need for regulatory changes, e.g., more Group 2 companies

The various stages in the life cycle of a pipeline were discussed, and audience members suggested both lagging and leading EPIs for each phase: design, construct, operate and abandon.

Design: Lagging:

- Length of time – project justification
- Lessons learned – time to get approval
- Fewer Information Requests
- Additional studies – cost of EA studies
- Corporate culture – management buy-in to environmental protection
- Less public consultation
- Fewer conditions on approvals

Design: Leading:

- Experience of design team
- Suitability of pipe for service
- Consultation
- Track record of company
- Budget projections ($/pipe)

Construction: Lagging

- No spills
- No grizzly defense kills
- No net/extra loss of habitat
- Number of non conformances to plan
- No regulatory violations
- Amount of extra space used

Construction: Leading

- Wildlife site specific
- Historical vs studies done
- If weather is as planned
- Constructed in planned season, appropriate Environmental Protection Plans for season
- Environmental training in place to achieve compliance
- Cumulative effects of development (roads)
- Lack of pre-construction concerns
- Environmental person onsite working with team

Operations: Lagging

- Spills
- Reclamation
- Landowner response
- # of integrity inspections
- ROW inspections
- # of identified issues
- Issues tracking
- # of exposed pipelines at crossings
- # of encroachments not authorized
- Public awareness
- Line hits
- Estimates of decommissioning costs – lower cost if it is well maintained
- Knowing environmental liabilities

Operations: Leading

- Quality of response
- Frequency of monitoring, flyovers, inspections
- Environmental meetings/training
- Landowner complaints – lots or none
- Environment, Health and Safety management system
- Monitoring environmental quality standards
- Maintenance $/km
- Waste reclamation audits

Abandonment: Lagging

- Minimum surface disturbance
- Remediation successful, % contaminants left
- Equivalent land capability
- Level of disturbance that is acceptable
- Zero disturbance of watercourses
- Proper disposal of pipe/waste
- Landowner satisfaction
- Environmental Protection measures should be as rigorous as for construction
- Appropriate for time of application
- Conflicting priorities
- Landowner wants pipe pulled

DFO Initiatives

K. McAllister (DFO)

Department of Fisheries and Oceans Canada (DFO) is moving to a more proactive, more comprehensive, less bureaucratic approach. That will mean more early intervention, fewer referrals and more monitoring.

The DFO is taking a risk assessment approach, to focus on higher risk projects. There are two tools to assess risk. The Pathways of Effects is the proposed approach to standardize aquatic effects assessment. This is the first step in the risk assessment process, illustrated through a large flow chart for different types of activities. This model will permit clear communication and understanding of aquatic effects, will identify knowledge gaps and allow input from partner agencies on appropriate mitigation measures.

The Pathways of Effects will be separated for land-based vs in-water activities. In-water activities will address common aquatic effects such as:

- Habitat quality and quantity
- Flow
- Direct or indirect mortality

The Pathways of Effects

- Provides a framework to standardize decisions and streamline regulatory processes
- Helps determine scientific needs
- Transparent decision process
- Common understanding linkage between cause and effect

The speaker also discussed the DFO's risk management approach to activities affecting fish habitat. This approach will provide an improved focus for program resources. Residual impacts must be examined more closely and additional assessment needed and risk management applied when there are negative adverse residual effects. The criteria to assess risk would be the severity of the impact and the sensitivity of habitat.

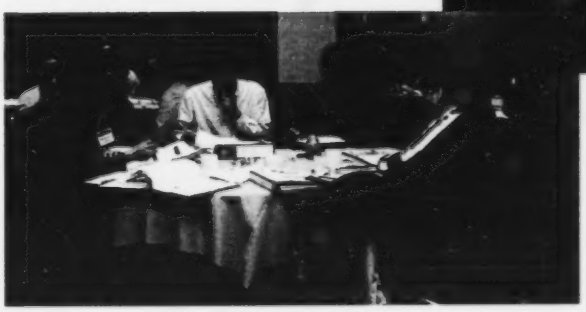
He indicated that there is a need to bring the level of risk down, and that will reduce regulatory oversight. There have been tools developed for different risk categories, as follows:

- Low risk: operational statements, guidelines, partnerships, certification
- Medium risk: regulations, class authorization, Canadian Environmental Assessment Agency (CEAA) class screenings
- High risk: further standardization of authorization conditions, possible elaboration of innovative approaches to compensation

More consistent application of the *Fisheries Act* and CEAA is also expected with new signing protocols. The speaker also commented on Section 5 letters and that navigable waters protection is now part of Transport Canada. However, the same staff are involved.

The speaker was asked about the Prairie Operational Position Statement going national and it was indicated that this statement will be replaced with a national version. Audience members were interested in seeing a larger version of the risk matrix that was presented.

Safety Management



Reporting of Incidents and Events under the National Energy Board Act, COGO Act, Canada Labor Code, TSB and Others – Introduction of a Draft Guidance Document. Part I

Karen Duckworth

Companies regulated by the NEB are required to report certain events as prescribed under a number of regulations, Board orders, Certificates and Board letters. The NEB acknowledges that there is some confusion around reporting requirements and is currently developing a flow chart to assist NEB-regulated companies to clarify reporting requirements. This tool was presented to the participants for comment.

The flow chart illustrates reporting events to the NEB, the Transportation Safety Board (TSB) and Canada Labour Code. Sections of the document were discussed, comments and suggestions were provided.

The definition for "disability injury" is the same in the Canada Labour Code regulations and the Safety Performance Indicators requirements from the NEB. As such, reported numbers for disability injuries should correlate closely, but the NEB finds that this is not the case for most companies. This fact indicates a lack of understanding of reporting requirements on the part of regulated companies. As a result, NEB inspection staff will be increasing their scrutiny of companies' report files. However, the situation also points to a larger problem: companies do not know when to report an incident, or to whom. Thus the NEB has developed a detailed flow chart to help clarify the matter. Session participants were asked to review the draft flow chart and offer comments.

Every company has its own process for dealing with safety and injury incidents. When an incident occurs, the process is initiated. It's important to understand how individual corporate reporting procedures mesh with NEB requirements.

Industry would prefer a one-window point of contact (phone number, website, etc) as well as the harmonization of reporting requirements between the NEB and the TTSB. The sheer size of the draft flow chart shows how complex the reporting requirements are at present. Surely there is room for streamlining.

With regard to security incidents, the participants suggested that the NEB set a high threshold for what is reportable – minor incidents such as vandalism need not be reported. The speakers replied that while it's important to report such incidents to police or local authorities, it is now also the NEB's mandate to include security in its scrutiny and regulations. Some clarity is needed regarding how far this mandate needs to extend.

With regard to the need for guidance notes, the Board staff asked participants whether the flow chart would be sufficient or whether additional guidance would be helpful. There was strong support for the flow chart only, though the speaker indicated that the NEB would likely prepare a guidance document at some point. In that case, participants recommended that the document be organized by incident type, with criteria on what needs to be reported within each category. Guidance should include examples clearly demonstrating correct and incorrect reporting procedures.

Certificates and Board Orders may also contain specific reporting requirements that will continue to be in place and must be followed, even if the flow chart and Guidance document are in place – these tools will not cover every situation. The next version of the flow chart will be sent to industry for review and comment.

Reporting of Incidents and Events under the National Energy Board Act, COGO Act, Canada Labor Code, TSB and others. Introduction of a Draft Guidance Document. Part II

Karen Duckworth

This session was a continuation of Part I. The main question under examination was: If a company has already reported a safety or injury incident to the NEB (using the flow chart process) why is a Detailed Incident Report (DIR) required?

The NEB receives 60-80 safety incident reports annually, in addition to 30-40 crossing reports (incidents involving crossing of a pipeline right-of-way, that include 2-3 major pipeline strike incidents).

DIRs are a means for the NEB to review an event, follow up and close the file. DIRs are also a means to determine what actually happened – the NEB has noted considerable discrepancies between the initial incident report (as per the flow chart process discussed in Part I) and the true details of an incident. Additionally, there is a wide variation in how companies report incidents, the level of detail and the actual information reported.

The NEB determined that a standard reporting template was required. Currently a PDF document outlining reporting requirements is available on the NEB's website, but there is still no standardized reporting. The NEB has therefore developed a draft online reporting template. The speaker did a "live" demonstration of the template and answered questions, noting that the template is in very early development.

Industry indicated that the new reporting template appears to require more information than was previously reported. The NEB representatives responded that while more information is being requested, the NEB's motivation is to avoid additional information requests, which have been common under the previous reporting procedure.

Overall, industry thought the amount of information requested on the template appeared to be onerous.

Industry strongly supported the submission of a single report to multiple regulators and agencies. Most companies have their own internal reporting procedures and would like to continue enjoying the flexibility to generate their own reports, as opposed to filling in an NEB template.

In addition, if the incident is minor, a company should have the flexibility to state that only the initial (flow chart) incident report would be submitted and a DIR would not be completed.

Participants had numerous questions and comments about the detailed working of the template, the pull-down menus and choices available, which fields would be mandatory, what order fields should appear, and so on. These comments were captured on flip charts by NEB representatives to be incorporated in their ongoing development of the DIR template.

A comment was made regarding training of employees and contractors. Training is critical to reducing safety incidents, yet training presents a multitude of challenges. Worker turnover is very high and the demand for skilled workers has an impact on safety. Workers used to take responsibility for their own safety but now that responsibility has been shifted to the employer. Young people in the field are untrained, veteran workers have retired or are otherwise removed from the workforce – no mentoring or experienced supervision is available. Companies must re-think how to attract, train and keep good workers, which ultimately will have an impact on the number and severity of safety incidents.

At the session's conclusion, the speaker committed to take away the comments and suggestions, consult with the TSB and generate another version of the template for industry review and comment.

Safety Performance Reporting, Part I

Henri Simoneau

The NEB published the report "Focus on Safety and Environment - A Comparative Analysis of Pipeline Performance" at the end of March 2005. The report provides data on the safety, integrity and environmental performance of regulated pipeline companies.

In 1999 the NEB initiated its Safety Performance Indicators (SPI) as a means of comparing safety performance among NEB-regulated companies and similar industries elsewhere in the world. The aim was to focus on areas that appear to be safety concerns in order to improve safety performance.

The "Focus on Safety and Environment - A Comparative Analysis of Pipeline Performance" Report was distributed to participants for their review and comment. One of the report's major findings was the difference between safety incidents involving employees versus contractors – the number of incidents involving contractors was almost five times greater, although overall safety performance did improve in the 2001-2004 time period covered by the report.

The higher overall rate of contractor safety incidents is of concern to the NEB, although participants agreed that the nature of contractor work may be responsible. Other participants disagreed, saying that any injury is unacceptable and that contractors are valued as much as employees. Contractors may be exposed to higher risk, but a higher number of safety incidents is not acceptable. Why are companies not providing the same level of safety for both employees and contractors? The goal is to bring safety in line for all groups.

Pipeline companies may have little control over whom a contracting company hires or how contract workers are trained. Companies may need to increase inspection and supervision of contractors. It is important to form safety habits and procedures that apply to all situations.

One factor is poor training, a result of high turnover. Tight construction schedules and resulting fatigue may also contribute to contractor safety incidents. Pipeline construction sites are often remote or in difficult environments, which can contribute to accidents. Another factor leading to the difference in the number of safety incidents may result from how incidents are reported – for example, lost-time accidents may not be reported if the worker is able to return to work but must take on different tasks. Honesty and clarity in reporting is needed.

One audience member asked whether the NEB had compared its data to the Worker's Compensation Board (WCB) data, but WCB data is not in a form that can be easily compared. Overall trends seem to indicate that pipeline industry compares favourably to other construction-related industries with respect to safety incidents and injuries. Likewise the data collected by the Canadian Association of Petroleum Producers (CAPP) is not easily comparable to NEB data. It is not reasonable to compare NEB-regulated companies to CAPP companies. Activities and operations between these two groups are very different. It is also difficult to compare NEB-regulated companies and their contractors to separate industry groups such as truckers, welders, and so on.

Safety Performance Reporting, Part II

Henri Simoneau

The second part of this session examined pipeline performance as reported in the March 2005 report "Focus on Safety and Environment - A Comparative Analysis of Pipeline Performance." The report indicates that overall performance of NEB-regulated pipeline has improved, with no ruptures reported in 2002 or 2003.

There was minimal discussion of the report's findings. The NEB is continuing to seek public comment on the report. Similar to the safety incident portion of the report (Part I of this session), it can be difficult to compare data collected from various sources. One participant commented that it can be difficult to quantify natural gas releases and suggested a simpler way to report such releases would be by category. This idea needs further discussion. The NEB examines the data for trends to see if there is an area that requires focus or improvement.

Integrity Management

Integrity Management Oversight

Danielle Demers
Glenn Cameron

This session opened with an overview of the NEB's approach to regulating integrity management. Oversight activities include audits, meetings and inspections.

Audits use a top-to-bottom approach consistent with management system principles. This comprehensive process includes document review and personnel interviews, field verification and a corrective action plan with follow-up. (If there are no field activities at the time of the audit it is difficult to conduct field verification.) This process determines the adequacy and effectiveness of an organization's Integrity Management Program (IMP). Companies are chosen for audits based on records of non-compliance, internal knowledge, and prioritization of companies. There is no formula to determine when a company will be audited. The NEB gives four months' notice of an upcoming audit. Part of the process is a pre-audit meeting where timelines and other details are discussed.

While audits can be thorough, flexible and involve a technical expert review culminating in a detailed audit report, they can also be resource intensive, require significant preparation by both the audited company and the NEB, and constitute a more involved and formal process than other activities such as inspection. Any issues discovered are corrected post-audit.

Meetings between the NEB and a company are held to provide an integrity activity update for the past and upcoming year, and to address any company or NEB concerns. Group 1 companies generally meet with the NEB annually, while Group 2 companies meet with the NEB less frequently. Meetings offer opportunities to build rapport between the company and the NEB and provide proactive communication; they are an informal and open setting that facilitates NEB and company questions.

Inspections are intended to help the NEB learn how a company implements their IMP in the field. The on-site examination of field activities verifies compliance with regulatory requirements. Timing depends on issues or activities, and inspections are more frequent than audits.

When compared with other activities at the NEB, inspections require less resources and preparation, are of short duration (one to five days), use a simple reporting process, and allow issues to be addressed on-site. Some coordination and scheduling are required in advance of an inspection. Inspections are less thorough but more focused than audits (they review a specific location at a specific point in time compared to an audit, which looks at the broader picture).

The NEB has learned over time that meetings are effective for information sharing, and that audit and inspection results vary. Adequate programs don't necessarily equate to adequate field practices.

The focus of the presentation then moved to analysis and learnings from the *Onshore Pipeline Regulations, 1999 (OPR-99)* audits. The NEB regulates just over than 100 companies that are subject to the goal-oriented *OPR-99*. The speaker detailed *OPR-99* audit results for some 26 companies, indicating that on average there were 12 findings per audit. Findings are areas of non-compliance with regulations or non-conformance with management system principles.

Forty-three percent of findings were in the area of Emergency Response, with 23 per cent in Environment, 22 percent in Integrity and 12 percent

in Safety. The high Emergency Response numbers could be due to a focus on that area of late. Issues common to all technical disciplines include: programs, manuals, internal audits and inspections, training, and operations compliance.

In response to industry feedback, findings and recommendations are written to be as specific as possible to sections of *OPR-99*, to help the company formulate a corrective action plan. The highest number of findings are in Section 40 – "A company shall have a pipeline integrity program."

The NEB intends to continue meetings and inspections, to conduct more meetings and inspections with Group 2 companies, to ensure future audits are either full *OPR-99* or focused by discipline, and to ensure its Integrated Compliance strategy will look at particular disciplines where there seems to be a problem.

At this point the speakers opened the meeting to questions and comments.

A question was asked concerning operators who have facilities on either side of the Canada - U.S. border. In the U.S. they have been rolling out highly prescriptive regulations on pipeline integrity, and there is a concern about whether American requirements will meet Canadian ones. The speaker responded that in general if a company is compliant with the more prescriptive regulation it should comply in Canada as well.

An audience member was curious about how analysis of findings from an integrity point of view could help individual companies improve their practices. The speaker hesitated to provide individual company specifics to protect privacy, even though the audit reports are public documents. However, companies can request reports and review the findings themselves. Another participant suggested more openness by the NEB to facilitate sharing learnings would help companies improve their IMPs.

A clarification was requested for a finding of non-conformance to management system principles. There is nothing in the *OPR-99* that mandates a management system, although it is included in the Guidance Notes. The speaker agreed that this is an issue.

Where both the NEB and provincial regulators regulate pipeline integrity management, the question was asked whether any work has been done to find synergies between the regulations and whether it would be possible to do combined audits. The speaker confirmed that if an organization operates wholly within a province, it is regulated by that province, not by the NEB. However, there are initiatives underway to work on harmonization, to try to make rules simpler.

Since the introduction of the audit program, an audience member wanted to know, how much have incidents gone down, and if not at all, how can the program be justified? The speaker indicated that the NEB has not audited companies more than once, and each audit has resulted in an average of 12 Findings, which indicates that regulated companies still have deficiencies in their programs with respect to compliance with *OPR-99*. While there is no direct correlation between audits and incidents, it is implicit that if companies have programs that are in complete compliance, there should be fewer integrity related incidents. An NEB representative noted that for the first time in NEB history there have been two consecutive years without a rupture. Rupture and incident data can be found in the NEB annual report and rupture data for the last ten years can be found on the website.

In response to other comments and questions from the audience, the speaker made the following points:

- The NEB is developing integrity performance indicators to measure company performance and its own performance as a regulator, while understanding it is the companies that do the work.
- The NEB is also re-examining its processes in terms of the number of companies it will audit; for the next year, it expects to complete five focused audits. Given the number of companies regulated by the NEB, a re-audit is unlikely. Timelines are being implemented for all new audits, as well as for corrective action plans.
- Audit criteria will be made more specific and detailed, to assist companies in complying.
- The NEB has only been conducting integrity dig inspections for the past year, but with more inspections, over time, they should be able to identify trends.

Integrity Performance Indicators – An Examination of Performance Indicators Developed by Companies, Industry and Regulators

Panel: Joe Paviglianiti
Larry Hunt, Duke Energy Gas Transmission, on behalf of CEPA
Arti Bhatia, Alliance Pipeline, on behalf of CEPA
Matthew Thompson, Enbridge Pipelines
Facilitator: Danielle Demers

The purpose of this session was to understand the various perspectives on Integrity Performance Indicators (IPIs) to aid in the development of the NEB's own indicators.

An audience exercise was introduced, whereby participants were asked to suggest leading indicators to demonstrate that a company's Integrity Management Program (IMP) is effective. (This question was to be answered without using leaks and ruptures, as they are considered lagging indicators.) A number of indicators were identified by the audience, including:

- km of pipeline inspected compared to total km installed
- integrity digs resulting in repairs
- number of near critical defects requiring immediate action
- number of unauthorized crossings or encroachments observed
- number of near misses
- corrosion coupons
- pigging data – frequency of getting maximum defect size and frequency versus critical defect size
- preventive maintenance and the extent to which it is carried out
- percent of planned inline inspections completed – risk-based
- number of repairs made
- a company's internal audit program
- cathodic protection readings
- third party hits
- whether companies are following their IMP
- percentage of digs that turn into repairs

The group suggested more than one indicator is needed, and that a risk-based approach should be used.

The NEB speaker then presented the NEB's proposed IPIs. The purpose of these indicators is to measure the effectiveness of regulated companies' IMPs, which, in turn, measure the NEB's effectiveness in regulating Integrity Management.

The proposed IPIs fall under three sub-headings:

1. Inspection, i.e., the percent of system inspected by method of inspection, and the percentage of system that can accommodate In-Line Inspection (ILI) tools;
2. Defects, including the number of defects or repairs per kilometre and the number of Type-1 (severe) defects per kilometre; and
3. Assessment accuracy, i.e., the percent of digs containing defects or repairs. As well, there will be two lagging integrity indicators: pipe body leaks and failures (ruptures).

Reporting requirements were summarized, and the speaker assured the audience that company-specific data and analysis would not be published, while analysis examining comparisons with other publicly available reports would be made available.

The Alliance and Duke Energy speakers presented the Canadian Energy Pipeline Association's (CEPA) perspective on performance indicators. As well as providing an update on the development of CEPA's indicators, they discussed the complexities associated with the collection and analysis of the proposed indicators. Every company has an integrity

program – their objective is to contain the product carried by the pipeline – so it's a matter of measuring the effectiveness of the program. CEPA is currently working to finalize and implement its IPI Project.

The Enbridge speaker presented Enbridge's approach to measuring the effectiveness of its IMP. Enbridge does not use leading performance indicators to assess IMP effectiveness; the number of leaks and failures is currently the only valuable quantifiable indicator. At Enbridge, they have concluded that audits and reviews are the best method for assessing IMP effectiveness.

A question was asked that given the current focus on IPIs for pipelines, whether any thought has been given to IPIs for above ground facilities regulated by the NEB. The NEB speaker indicated there has been some discussion about facility IPIs, and this will be reviewed sometime in future.

A participant from the western Arctic asked how much experience companies have had with pipelines built in permafrost. The speaker answered the NEB has experience with the Norman Wells pipeline.

When asked whether leading indicators will be mandatory, given their effectiveness or lack thereof, the speaker said once there are trends established, the effectiveness of the indicators can be evaluated.

A question from the floor dealt with whether there is any thought to giving indicators for different commodities, for example, gas lines, oil lines, and sour gas, or is it going to be just one set of performance indicators. The speaker said right now the consideration is for one set for all. Internally, the NEB would know what type of products the company carries. There are not many sour gas pipelines, so it would be difficult to maintain confidentiality of the data.

A participant asked for clarification about the length of pipelines that will accommodate ILI devices. The speaker said if it had a pig trap, then it would be piggable. He noted the NEB is currently preparing an frequent asked questions (FAQ) document and this question may be incorporated as the NEB tries to address some of the ambiguity.

An audience member said he didn't understand how the indicators help make the NEB a better regulator and how this makes the public safer. The speaker answered that collecting data is one component of the compliance strategy. It allows the NEB to measure the effect of regulatory measures and also provides some validation that the NEB's output and effort are also worth it.

At the end of the session, the facilitator asked the audience how they thought their company could use IPIs; how they benchmark; and what their experience is in developing performance indicators. There was no response from the audience, who then indicated with a show of hands that five out of the 60-odd participants had developed some type of measures.

A final question was asked about whether it is good or bad if a company is doing lots of repairs. The whole point of an IMP is to manage repairs, so older pipe is no worse than newer pipe. The speaker replied that it could either be due diligence or poor integrity. The Alliance speaker added that it was important for companies to look at integrity management of their pipeline and risk mitigation and its effectiveness. Indicators are one measure along with dollars spent and resources applied, among others.

Integrity Engineering Assessments, Tool Selection and Accuracy

Dr. Alan Murray
Dr. Stephen Westwood, BJ Inspection Services

In this session the NEB speaker shared NEB expectations on the use of Engineering Assessments (EA) in verifying the integrity of a pipeline system. The BJ Inspection Services speaker spoke about In Line Inspection (ILI) techniques, focusing on tool selection and accuracy.

The NEB often receives applications to change class location; crossing conditions; reactivate a portion of a pipeline; change the service conditions such as operating pressure or product; and the reuse of material. To approve these applications, the NEB needs to be assured that pipeline integrity and public safety are uncompromised. That is achieved by requiring the submission of an appropriate EA.

About half the group indicated with a show of hands that they have been involved in an engineering assessment. The speaker asked for suggestions of what should be looked at during an EA, using the situation of a developer who bought a farmer's field through which a pipeline runs, and is going to put up 10 houses on the land. The audience suggested the company would need to look at the history of the pipeline, class location change, toughness and thickness of the pipe, defect tolerance, and hydrotest results of a section of the pipe. One participant noted that even in a trivial example there is the need to perform due diligence.

The speaker then provided a scenario whereby a company performs an inline inspection and finds an anomaly. They excavate and find corrosion and surface cracks. The audience suggested the NEB would require a test of that section.

An audience member observed that going from a Class 1 to Class 2 rating is one thing, but moving from Class 1 to Class 3 or 4 is more serious. If there was baseline data for the pipe used in the example, then the NEB could compare the old baseline with an updated data to see the deterioration. The speaker replied that there is an obligation to keep good records, but asked the audience to suppose there is a complete absence of material records or that information on the line is missing. In this case, an anomaly has been exposed: corrosion defects plus a manufacturing defect. He asked the audience what they thought the NEB would expect to see in an EA and they created this list:

- proposed mitigation
- proposed hydrotests
- cutouts
- more inspection

One audience member said his perception as a regulator would be that when an operator is mandated to do an assessment, it would be appropriate to do so because without an assessment the company would have to replace the pipe. The company must compare this against the risk if it doesn't do the engineering assessment. The speaker noted it might be cheaper to replace the pipe than to do an assessment.

The speaker then outlined factors that should be considered in the EA. These include safety margins, system history, records keeping, and determining the consequences of performing the EA incorrectly. He listed additional factors that are considered in assessments, including strength and leak test pressures and durations; type and orientation of defects found; and critical imperfection size, growth process and rate. He noted that fracture mechanics is the basis for all the pipe defect assessment methods used. Re-activation issues were then reviewed, followed by audience questions and discussion about EAs.

One question dealt with what constitutes NEB acceptance of the EA. The NEB tries to be proactive in helping companies to address issues they may have. Whether there is time for the NEB to do a thorough review or not, the company still has a responsibility to address the issues. While the NEB can still comment about the assessment at a future date, it is reasonable to expect that the regulator will let the company know if it is deficient.

Another audience member observed that from the operator's perspective, more timely approval would help cost management. When a company undertakes a costly mitigation approach, it doesn't want to hear a year later from the NEB that the approach was wrong. The NEB speaker said companies must realize silence is not always consent. He acknowledged that timeliness of NEB intervention does have cost implications.

The BJ Pipeline Inspection Services speaker then gave a presentation on ILI tools, stressing that it was important to choose the right tool for the job. Companies should ask the vendor for examples of a tool applied in their particular situation. This should be coupled with the right inspection technique and the right analysis to ensure accurate results.

He then outlined the principles of magnetic flux leakage, which works by magnetically saturating the pipe. When a defect is found, the magnetic flux leaks out, thus identifying the defect. Calculating defect size is then done by measuring its width and amplitude; this allows the dimension of the defect to be determined.

In discussing corrosion growth rate and monitoring corrosion growth, a participant asked for the speaker's opinion on pit matching, asking how it is possible to match pits from different techniques / technology, and what is the benefit of comparing pits over time instead of using newest data only. The speaker said the way they were detecting and sizing features is different in 2005 than it was in 1992; a dramatic increase in corrosion defects on the line can now be identified because the new techniques are better. Algorithms are used to convert the data, allowing comparison.

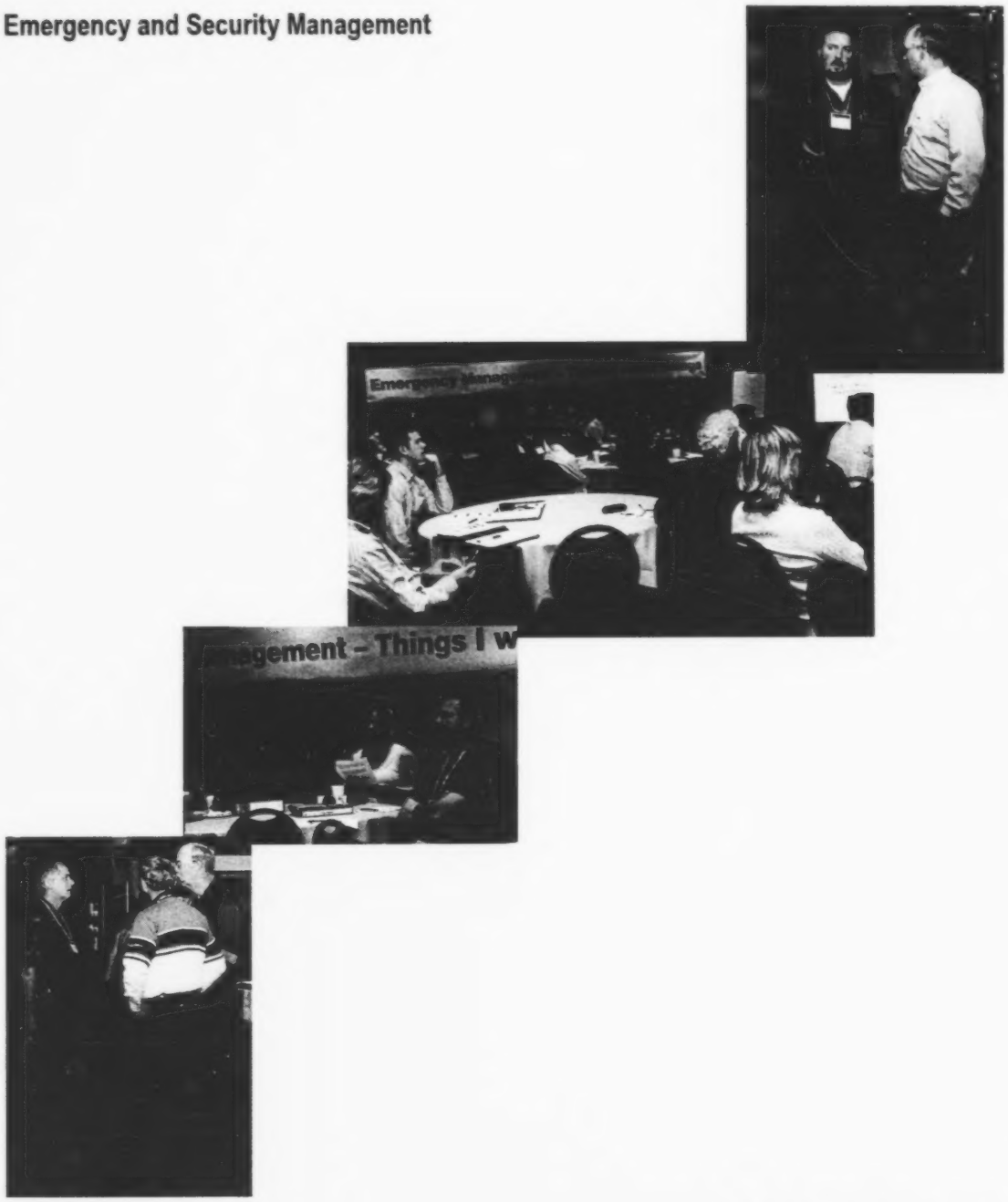
When asked about the concept of comparing corrosion growth rates, the speaker noted that all that can be concluded is that a defect might or might not have grown. His company looks at distribution of the defects and the ones at the high end of the distribution are checked manually to make sure they are accurate, using the new sizing algorithm.

The question was asked whether the NEB would consider allowing a pipeline to increase operating pressure simply by ILI or EA without hydrostatic testing. The speaker said that sections of the code allow it, but it is only allowed up to 50 per cent of Specified Minimum Yield Strength and 80 per cent of original design pressure.

A participant noted that if something goes wrong, the pipeline company has to take responsibility for liabilities. He was interested in whether the speaker could see the NEB assuming any liability if something goes wrong. The speaker said that if the legislation were totally prescriptive, the regulator would have to take responsibility because the company was only doing what it was told to do. Currently we are somewhere in between, and so it's a joint responsibility.

A final question dealt with changing class designation from Class 1 to 3 and whether it is allowed if the condition of the pipe is very new, well known, and 'the latest and greatest', or whether a pipe replacement for thicker wall is a necessity. The speaker said the company could do the pressure calculation and if it is suitable as per the code, there would be no problem, but ultimately the pipe can't be put into a situation where it is doing what it was not designed to do.

Emergency and Security Management



Emergency Preparedness and Response (EPR) Programs: Audit Findings 2001-2004

Shane Richardson

The NEB has a mandate to assess all of its regulated companies' emergency preparedness and response (EPR) programs to ensure adequacy. This assessment will be completed over a three-year period. This session outlined factors that will be included in the process and gathered information from participants regarding issues related to the program.

The NEB performed 26 audits in the 2001-2004 period; 24 of these audits included EPR programs. On average there were 12 findings per audit, approximately one third of which related to EPR programs. Group 2 companies tended to have a higher number of findings related to EPR than Group 1 companies. In most cases, a second, follow-up audit, to see whether findings are being addressed, has not been done yet; this process will be completed over the next three years.

The EPR findings were highest in four areas:

- Emergency response (ER) manuals – manuals not developed for all or parts of the company's system; information out of date; manuals/updates not distributed to first responders, NEB and other agencies; manuals too broad (do not address specific conditions); inappropriate incident notification and tracking
- Training programs – training programs not developed; no programs for new employees; no follow-up programs for expired training (such as first aid) as required by company programs; training specified in ER manual not provided
- Emergency exercises – programs not developed; no defined frequency or scope for exercises; exercises not conducted as specified by company programs/manuals; no structured approach
- Continuing education and liaison – programs not developed; no formal plan for scheduling, data collection, objectives for continuing education and liaison; out-of-date contact information for residents, agencies, first responders); no verification of first responders' capabilities; no training for first responders; no involvement of municipalities

Participants discussed these four topic areas and reported back to the group. NEB representatives present at the session intended to use the discussion findings, comments and questions in revising and evolving the audit process with respect to EPR programs.

Overall, session participants felt that EPR requirements should be less prescriptive and more flexible, in accordance with the NEB's objective to develop goal-oriented regulation. The discussion groups reported as follows:

ER Manuals

- Is it possible for the NEB (or industry associations) to develop templates for ER manuals?
- NEB must ensure that auditors are properly trained to assess EPR programs and ER manuals
- NEB should recognize intent and support the efforts that companies make toward developing EPR programs and the associated ER manuals
- Is there room for self-audit or third-party audit?
- Currently there is no consequence for non-compliance – how long does a company have to complete their compliance plan?

- Are ER documents public as a result of the audit procedure?
- New Geographic Information Systems and similar technology may help in keeping contact lists up-to-date
- How will the NEB raise the bar for companies not performing well in EPR development versus recognizing and supporting those making good progress?
- With regard to the overall audit and approvals process – if the ER manual meets with NEB approval, other aspects of a company's EPR program should also be satisfactory – in other words, a good ER manual should reduce audit findings in the EPR area

Training Programs

- Training programs have a high cost
- Staff turnover and logistics (remote locations) also pose problems for training; training supplies are not always available at remote locations
- Corporate management buy-in is critical to the success of training programs; companies must commit to training, especially for new employees, appropriate to the employees' role
- How should companies establish a training standard? Are there common training programs that already exist?
- Who certifies that employees are adequately trained? Some training programs are formal and carry certification; other training is in-house with no testing or certification
- Emergency Preparedness Canada is a resource for assessing in-house training programs
- Focus on recognized programs or courses
- Tabletop training/emergency exercises are valuable; local authorities and first responders should be invited to participate in tabletop sessions as well as field exercises and training – this practice also affords an opportunity to build relationships with local agencies
- Training programs must include site-specific information

Emergency Exercises

- Use a risk-based approach, base exercises on the company's specific needs; the company's incident history, basic knowledge and overall performance should be factors in determining frequency and scope of exercises
- Develop a systematic approach to learning and follow-up from exercises
- Facilities, activities and geography are all specific and must be considered when developing exercises; again, a systematic approach will facilitate effective emergency planning exercises
- Companies should determine the frequency and scope of their exercise program, propose the program to the NEB and be prepared to defend/support their proposal; frequency needs to be flexible
- The NEB should allow companies to set the scope and frequency based on company history, facilities, existing EPR programs
- Companies must respect the limits of first responders; documentation is one way to demonstrate this respect and understanding
- Capture learnings from equipment audits, tests and post-mortems after exercises are completed; documentation is vital

Continuing Education and Liaison

- Recognize that contractors have different levels of involvement and participation in company activities – some are only on site for brief periods or specific jobs, others are long-term; therefore different levels of training may be required
- Who is responsible for verifying capabilities of first responders? Also note that training for first responders can be general or specific to certain products (hazardous materials)
- Companies should meet with first responders, explain issues and expectations; it's then up to the responder to be prepared and trained
- Two broad types of resident notification – urban and rural
- Urban generally does not involve individual residents but relies on first responders in the area
- Rural does involve individual residents, thus the list needs to be current and up-to-date
- Awareness and due diligence on the part of both companies and residents/agencies/responders are at least as valuable as education and training

Security Management

Leo Jansen
Jamie Kereliuk

Recent changes to the *National Energy Board Act* provide the Board with a clear statutory basis for regulating security of energy infrastructure under its jurisdiction. The NEB has completed Pipeline Security Management Assessments (PSMAs) on all Group 1 companies and two Group 2 companies. These assessments provide the NEB with a better understanding of how regulated companies are presently managing pipeline security; how to promote security awareness among companies; and how to identify various security issues facing regulated companies. The assessments will also assist the Board with the development and implementation of future security focused regulatory initiatives.

The facilitators presented an overall perspective of how the pipeline industry is managing security and what the key security concerns or issues appear to be within the industry at this time. As well, they provided information about the Board's plans with regard to regulating this area.

One key change is that the NEB is allowed to keep security information confidential in its orders or proceedings.

In response to the new security mandate, the NEB undertook PSMAs, as opposed to audits, to gain a better understanding of existing security measures and programs within the regulated industry. PSMAs were conducted on several types of regulated facilities and focused on three key areas: physical security management, cyber/information technology security management, and personnel security management. The goal of PSMAs was to assist the NEB in developing and implementing security management regulations and initiatives. By March 11, 2005, PSMAs were completed for all 10 Group 1 companies and Group 2 companies.

The NEB found that all companies have security management programs, but there is a wide variation in scope. Companies typically have informal knowledge of their key vulnerabilities and risks but may not have a specific detailed understanding of them. Detail and documentation varied widely. Typically, security management is integrated into existing operational programs.

Specifically with regard to physical security management, typically the emphasis is on large or critical facilities.

With respect to cyber security, most companies take this very seriously but the Board found that sensitive material is not well managed or systematic.

Security is usually an "add-on" responsibility for company personnel. There is little security training for staff who are responsible for managing security and little pre-employment security screening. Access control (visitors, contractors, employees) varies widely.

Overall, communicating security related information within and outside the industry remains a key challenge.

Through an e-mailed survey to assessed companies, the NEB sought feedback about the PSMA process. There was strong support from the industry for the NEB's 'learn first, regulate later' approach. At the workshop, the facilitators asked session participants to take the same survey and to provide other feedback on security management.

The NEB proposes to take the following steps:

- Change the *Onshore Pipeline Regulations, 1999* to include security management requirements;
- Establish minimum security management expectations;
- Develop a Canadian Pipeline Security Management Guide;
- Apply these learnings to the regulation of security management for international power lines;
- Streamline security initiatives with provincial and federal partners and agencies.

Concerns were raised about the competency of NEB auditors to assess security programs. It was expressed that auditors must be fully trained and aware of security issues.

Participants felt that asking companies to submit annual third-party security management program assessments would be onerous and of limited value; every three years was suggested as an alternative.

Overall there was a great deal of concern about overlapping jurisdictions and reporting requirements; the need to streamline reporting was emphasized. A one-window approach to reporting was strongly recommended. Concerns were raised regarding the overlap of jurisdictions between reporting security incidents to the NEB when such incidents are currently routinely submitted to RCMP or other law enforcement agencies. It was suggested that only security incidents involving safety or environmental impact should be reported to the NEB. There is a need for the NEB to develop a system for companies to report security incidents.

Any company with employees performing security functions must ensure that those employees are trained and certified. Certification and licensing of security personnel are being reviewed at the federal level. To date, the NEB has not taken steps to incorporate the upcoming legislation into its processes.

Participants offered advice to the NEB to be careful about casting the new regulations too broadly, especially with regard to cyber security. Industry needs to take security seriously now before there is a critical incident – participants encouraged the NEB to take a leadership role, rather than asking what industry wants. "Propose some standards, and get going," said one audience member. NEB facilitators responded that the Board wants to be sure they are taking the right direction with regard to security issues and management.

Security involves everything from vandals and casual criminals to professionals and terrorists. On-site security measures are a deterrent only.

The NEB advised that the RCMP and the Canadian Security Intelligence Service have no specific standards or initiatives regarding pipeline security. The NEB shares information and although it may not have the best in security management expertise, the NEB may be in the best position to regulate pipeline security based on knowledge and understanding of the industry and facilities.

Emergency Management at the NEB, Part I

Hope Henderson
Mike Sullivan, Alliance Pipeline

Emergency Management (EM) is evolving at the NEB. Before 2005, there were one or two people dedicated to EM. In late 2004, Board members placed a higher priority on EM, largely due to audit findings and external influences. As a result, additional resources have been added. The four NEB employees allocated full-time to EM have been assigned specific companies with whom they will work to build relationships over the next three years.

The new mandate for EM includes three main priorities. First, the mandate involves assessing the effectiveness of the Emergency Response Programs (ERP) of all NEB-regulated companies and facilities. The assessment process has yet to be finalized.

Second, as part of the NEB's move toward implementing a Quality Management System – including potential certification from the International Standardization for Organization (ISO) or another certification agency – the NEB plans to develop an internal Emergency Management System (EMS).

A third priority is to establish inter-governmental response coordination and clarify jurisdictional control across Canada. This would ensure that in the case of a serious incident, depending on the situation, the response of multiple departments or agencies would be prompted. While this initiative has been kicked off, the EM group is just now determining how it might work. Earlier this year at the inter-agency exercise in the Northwest Territories, it was decided that the NEB would be the lead agency for the scenario tested, with various levels of government, territory, RCMP, Environment Canada and other groups, depending on the situation, acting as support. While no document was distributed publicly after this meeting, copies are available from the speaker. Industry representatives are also welcome to participate in future meetings that will be held across the country.

Emergency Management at the NEB will continue to evolve. The direction of this evolution will include opportunities for stakeholder feedback and input. While the stakeholder communications plan has not been built yet, the speaker and her colleagues expect to take a two-part approach, including consultation and research, over the next 2-3 years.

One part of the plan is expected to be consultation with stakeholders including landowners, industry, municipalities, non-government organizations (NGOs), environmental groups, first response agencies, other government organizations, and industry organizations, etc.

The second part of the plan is expected to focus on a quantitative approach, for example, a research initiative. One idea is to develop a national-scope first responder survey to provide quantifiable data about the level of awareness of various agencies, and where they gained this awareness. The survey is expected to provide comparative data between first responder agencies geographically, and volunteer versus career departments, contrasting urban against rural groups, and based on any specialties, such as pipe compared to plant.

A question was asked about the timeframe for this consultation, and it was noted that while stakeholder consultation is expected to be ongoing, over the next fiscal year there are three to four sessions with other government agencies planned. They haven't defined stakeholders or timelines yet. There is a new stakeholder engagement group at the NEB, so

efforts need to be coordinated through that group to ensure stakeholders are not being contacted repeatedly by various NEB groups.

The speaker then introduced Mike Sullivan, Emergency Preparedness and Damage Preventions Coordinator for Alliance Pipeline. Sullivan is also the current chair of the Emergency Management Committee (EMC) for the Canadian Energy Pipeline Association (CEPA). He said the EMC has been seeking clarity on regulatory governance, to determine where the industry needs to focus to ensure compliance. While industry is ready to be measured against the *Onshore Pipeline Regulations,1999 (OPR-99)*, the NEB has outlined further expectations and goals in past presentations and in an all-company letter – expectations beyond the goal-oriented fabric of the *OPR-99* and the results of regulatory audits conducted by the NEB.

The EMC has discussed this issue at length. For example, is the April 2002 letter a regulatory instrument, a guidance document or a yardstick? Or, should the NEB determine the frequency and scope of emergency response exercises for all pipeline companies, regardless of influencing characteristics of individual pipelines systems or other means of ensuring emergency preparedness? The goal-oriented nature of the *OPR-99* allows pipeline companies to defend themselves independently during audit.

The Alliance speaker continued that Emergency Management Programs are vitally important to pipeline operations. However, due to a variety of differences between pipeline companies and pipeline systems when it comes to audits and inspections, the NEB needs to consider the "influencing characteristics" of individual pipeline systems and avoid using a single yardstick.

The EMC is working collaboratively with the NEB to devise a solution. Currently, the EMC is focused on the issue of the scope and frequency of emergency response exercises. The EMC is of the view that it needs to develop a method, perhaps best practices, for industry to determine scope and frequency of emergency response exercises. The EMC has had two meetings about this issue to date, with NEB support. While no clear plan has been developed, the EMC is optimistic that a collaborative approach will achieve this goal.

This session concluded with group discussion about the criteria that should be considered in the development of an EM program, including essential components and characteristics of an effective EM program, and what should be required as the essential components of an ERP.

When asked what needs to be considered when developing an EM program, participants noted the following considerations: (please note that this list is not in any hierarchical order) which are not presented in any order of priority.

- Risk analysis
- Manpower availability and skill levels
- Management commitment
- Policy
- Who the stakeholders are
- Product you are carrying (oil, sweet gas, sour gas)
- Location
- Regulator expectations
- Number of regulators and who they are
- Public expectations
- Identified hazards
- Industry best practices or standards
- Association commitments (CAPP)
- Internal resources
- Training requirements
- Knowledge base and experience of the third party responders / first response organizations
- Availability of equipment relating to remoteness of location
- Timeline
- Budgets

The audience raised a concern about using a template, which they saw as too prescriptive. With a template, organizations would only go as far as the template determined, and no farther. Also, companies would miss the ability to maneuver based on what's best for their organization. The CSA Z731 regulation is a possible template, but it doesn't seem to apply in all instances. In the NEB's experience, smaller companies want more prescriptive regulations and larger companies want a more goal-oriented approach.

When asked about the essential components and characteristics of an effective EM program, the audience came up with a number of thoughts. Keeping the public safe is the ultimate goal for any EM program. Knowing whom you are trying to keep safe and where they are, is critical. This facilitates communications and understanding between organizations and the people they are working to protect.

Goals must be set for any EM program, which will provide a sense of confidence that the organization is prepared. This can be evidenced by a long-term plan and timeline. Part of preparedness is having a complete emergency manual, and ensuring responders are adequately trained. Who funds the training for fire departments and others was discussed in detail. While larger companies have often provided funding for training fire department staff, it was suggested that companies also consider where their tax money is going, as municipalities and other levels of government should be allocating funds for emergency response training.

Evaluation (self, industry or regulatory), shared learnings and continuous improvement were also noted as characteristic of an effective EM program.

When asked what should be required as essential components of an ERP, discussion focused on contact lists and how to maintain them in the face of existing privacy legislation. Keeping contact lists up-to-date can prove a challenge, whether an organization chooses to knock on doors of homeowners to obtain current information or hire a secondary company to obtain the information.

One participant wondered why emergency responders cannot access contact information in emergency situations, circumventing the privacy legislation. He suggested a more coordinated approach to lobby the government to make this exception to the legislation. Industry could also work with regulators to change the legislation, in collaboration with other organizations, such as the railway. While other industries may not be regulated to the same extent that pipelines are, a collective solution on a regional basis is important.

The privacy conundrum also applies in the other direction; there is a conflict between public awareness and security that is not covered by regulation in Canada. However, organizations may have their own policies about how much information to divulge to landowners about location of pipeline, contents of pipeline, and consequences of an emergency. The consensus was that security and emergency management don't go together, but the needs of both must be satisfied.

Emergency Management at the NEB, Part II

Hope Henderson
Mike Sullivan, Alliance Pipeline

This session was a continuation of the first session. Participants resumed discussion to determine what they would regulate for Emergency Management (EM) programs and how they would ensure compliance; what they would retain from current regulation; and what they would change.

To determine what they would regulate, workshop participants said the eight elements of the April 24, 2002 letter would be a good start. The letter outlines elements that should be included in a company's Emergency Preparedness and Response (EPR) program:

- EPR program development (hazard assessment)
- Emergency procedures manual
- Liaison program (first responders)
- Continuing education program (public)
- Emergency response training
- Emergency response exercises
- Incident and response evaluation
- Emergency response equipment.

Regulation should be based on performance and risk, according to some workshop participants. A complete facilities inventory and risk assessment, including assessment of probability and consequences, are important to include in the regulation. Participants would institute minimum standards, with a goal of public and environmental safety, allowing companies to self-audit.

On the question of how to ensure compliance, workshop participants were clear that internal audits need to play a larger role, but not at the expense of external inspections, audits, exercises and interviews. A clear, predictable audit structure was suggested, where every company is asked standardized questions during an audit. While acknowledging privacy issues, it was generally agreed that allowing audit results to be shared among industry would probably result in improvements in the industry overall. Posting results on the NEB website would allow industry to learn from each others' best practices and find opportunities for continuous improvement. The downside is that no two companies are alike and no two situations are alike, so regulatory expertise is still needed to analyze risk assessment; no one method of determining compliance should be used to the exclusion of all others.

Consistency is key to ensuring compliance, from commonly used definitions and terminology, to regulatory expectations of organizations, to well-defined minimum standards. Industry must be informed about and aware of regulations and expectations; this can be achieved through greater active communication with the NEB.

A dispute resolution mechanism should also be established in the event that there is disagreement with the evaluation. It was suggested that in the instance of a disagreement, vetted third party consultants could evaluate the company and provide coaching and training if needed.

The groups wanted to retain the current collaborative spirit, as well as workshop and awareness sessions, saying that they learned from the sessions and from each other. They also liked that regulators are assigned to specific companies, allowing a mutually beneficial relationship to form over time, and would like to see this escalated to a more senior level of the NEB for certain situations.

They would, however, like to either clarify, change or get rid of the April 24, 2002 letter. Also needing changes or improvements are:

- The security audit, as business continuity is a company concern and security is not considered a core competency of the NEB; there is concern it may stretch the boundaries of the regulator;
- Communication and education efforts, which need to be enhanced;
- *Onshore Pipeline Regulations, 1999* – retain the spirit of it and also of the guidance notes, while changing its prescriptive nature to make it a more goal-oriented regulation.

Emergency Exercises: Oil

Ken Colosimo

The purpose of this session was to gather information about appropriate Emergency Response Exercise programs for oil pipelines.

Organizations have exercise programs and conduct exercises to test their Emergency Management Plan (EMP), to train and ready staff for emergencies, to demonstrate preparedness, and to train and ready first responders so if called upon they are trained and ready to protect people and the environment. Compliance issues arise because while the NEB expects companies to demonstrate they have an EMP in place, there are no prescribed standards against which to measure how well they meet these expectations.

As noted, this session was intended to gather information and commentary regarding appropriate methodologies and practices for developing and regulating oil pipelines and related facilities' emergency management exercise programs. The presenter used a series of PowerPoint slides to guide and prompt the audience for feedback. Comments have been grouped to best reflect the commentary provided by the session participants. These comments and other interactions with industry and the public will be used in the development of the NEB's programs with respect to these issues.

General Commentary

According to the audience, there may be less need for formal exercise plans and more need for companies to demonstrate their preparedness by actually doing the exercises. Exercises should point out any weaknesses that need to be addressed; writing good plans may not be enough to prepare an organization for an emergency. More practice may translate into enhanced readiness.

Communication will often make the difference between a successful exercise and an unsuccessful one; a functioning communications system is key.

Non-Company Involvement in Exercises

Many groups in a given community need to be involved in the exercises. As well as the pipeline companies, first responders and other municipal service providers need to be involved. One challenge is first responders' availability. They often don't have the budget or the time to participate in all of the training and exercises that they are invited to. Part of the difficulty is coordination with other companies who are also requesting first responders' participation. Response to pipeline issues is only a small part of first responders' responsibilities. Turnover in first responder staff was identified as another roadblock. Changes due to retirement, for example, create difficulty in ensuring all response personnel are trained. Additionally, volunteer fire departments, because of turnover, may need more frequent contact than other first responders, perhaps even annually. The onus is therefore on industry to demonstrate the benefits for first responders to be involved in the training.

One possible solution to this dilemma may be to offer the exercises as a free training opportunity, perhaps at provincial fire and police colleges and during RCMP training. Regulated organizations could collaboratively build and run a training program that shows direct benefits to the first responders and uses their time efficiently.

As well, it was identified that cooperation between agencies such as the Alberta Energy and Utilities Board and the NEB should be investigated to ensure their requirements and regulations are compatible. A suggestion was made that the NEB could

proactively work with other agencies to coordinate annual exercises. This might be helpful for smaller organizations that do not have the resources to set up exercises on their own, while regionalizing training for the first responders.

NEB staff identified that there are plans to conduct a nation-wide survey of first responders to determine regional knowledge levels and preferred method of contact and communication. Exercises are one training method, but there may be other, equally effective ways to achieve the same goal.

During discussions it was agreed that everybody who has a role or responsibility in the event of an emergency needs to be trained. Participants discussed that exercise programs could include a combination of:

- tabletops
- full scale, mock exercises; scenario
- drills
- formal training
- computer-based training

Frequency of Exercises

The right mix and frequency of such exercises depends to some degree on past experience. One participant suggested that a good starting point is to trend an organization's historical incidents to determine what scenarios might most likely occur. Other audience members offered examples of how their companies plan and conduct exercises. It became apparent that every company is different; the important point is to justify and demonstrate that your company has met its goals. Competency should be the measure, not the number of exercises completed.

One common point is that exercises should take place frequently enough so that they are carried out instinctively.

Competency of Responders

A definition of competency was offered as 'being prepared to meet any situation in a positive fashion'.

Measuring and demonstrating competency can be done in a variety of ways. One way is to focus on the exercise or incident 'review and learn' report, which indicates whether the exercise goals were met as well as identifies what went well and what areas need improvement. Because each exercise plan must include measurable objectives, it becomes relatively simple to determine whether those objectives were met. Any failures are addressed by corrective action, which will show whether the failure was taken care of in reasonable time.

Some organizations focus on individuals' ability to do the job, while others focus on the company's overall capability. As well, it was suggested that continuous learning with every exercise also indicates competency.

Participants wanted to clarify how the NEB defines competency, to ensure they are in compliance. NEB staff indicated that the NEB intends to be part of the formal evaluation in the future and will provide observations and suggestions during each debriefing session. It was clarified that the NEB regulates preparedness and determines whether companies are ready to respond. While there was some question about why the NEB needed to determine competency, others noted that the NEB has a unique window to judge organizations' competency. The session leader commented that, generally, Group 1 companies do very well; they have the resources and commitment. As well, there are a number of very good Group 2 companies, but the biggest issue is with Group 2 companies. These observations were based on a quick review of compliance information and anecdotal information. The NEB plans to formally document and trend existing and future information to determine what is working and what needs further work.

A participant suggested that industry is doing a pretty good job in the competency arena; in 15 years there have been no deaths or injuries of responders, employees or the public.

Emergency Exercises: Gas

Ken Colosimo

This was the second of two sessions to gather information about appropriate Emergency Response Exercise (ERE) programs, this one focusing on gas pipelines.

Organizations conduct exercises to test their Emergency Management Plan (EMP), to train and ready staff for emergencies, to demonstrate preparedness, and to train and ready first responders so if called upon they are trained and ready to protect people and the environment. Compliance issues arise because while the NEB expects companies to demonstrate they have an EMP in place, there are no prescribed standards against which to measure how well they meet these expectations.

As noted, this session was intended to gather information and commentary regarding appropriate methodologies and practices for developing and regulating gas pipelines and related facilities' emergency management exercise programs. The presenter used a series of PowerPoint slides to guide and prompt the audience for feedback. Comments have been grouped to best reflect the commentary provided by the session participants. These comments and other interactions with industry and the public will be used in the development of the NEB's programs with respect to these issues.

General Commentary

A member of the audience asked who takes on the role of 'incident commander'. This related to the provincial responsibility and legislation to manage non-national emergencies. There was informal consensus that when there is a significant failure or rupture, pipeline owners or operators may have no right to assume incident command. That authority is given through legislation, and laws may differ from province to province. It was suggested and generally agreed that it is not important who takes on the role, as long as there is an acceptable process in place such that everyone is trained to understand and participate in the exercises.

As a general comment related to the NEB's requirement that all companies undertake exercise programs, one participant pointed out that the NEB legislation does not specifically require companies to undertake exercises or exercise programs. The specific statement was agreed to by the presenter. It was noted in follow-up that the requirements are covered by other sections of the *Onshore Pipeline Regulations, 1999*, such as those related to training and safety.

Non-Company Involvement in Exercises

The presenter asked the audience to identify the appropriate personnel to be involved in exercises. In the past, the NEB has said that all staff need to be trained in any role they could be expected to fill, but it has been suggested that not everybody needs to be involved in the exercises.

The participants indicated that when it comes to other agencies and responders, the type of exercise may determine who is involved. In some cases, first responders such as fire departments may not attend exercises because the exercise location is too remote for them to attend and still undertake their other job responsibilities. As well, it was pointed out that first response budgets frequently do not allow for departments to participate in "non-core" responsibilities. This situation offers an opportunity for industry organizations and responders to work together to create and participate in joint exercises, which may prove to be more cost-effective over the long-term. One suggestion was that outside responders may find more value in tabletop sessions versus actual emergency exercises because

they would waste less time sitting in their trucks pretending to secure the perimeter and would actually be learning instead.

It was noted that first responders need to know how to respond to specific hazards and do not need to learn their core competencies at every exercise. Industry should therefore include as part of their emergency plans the first responders' need for immediate information prior to and during an incident.

To this end, it was identified that many companies meet personally with first responders regularly to give them information about their products and on-site expectations. For example, with gas, the primary expectation is that first responders will handle secondary fires, evacuate or shelter in place, and help secure the perimeter. It was suggested that these professionals only require training that is specific to a particular incident associated with specific facilities. In some cases, they almost need to be trained on what not to do. For example, trying to put out a titanium fire may make the situation worse.

It was agreed that exercise participants may vary depending on location. In small regional areas, for example, it was one company's experience that hospital personnel did not fully understand how to respond to H_2S or how to treat its effects, so involving them in exercises would be useful. It was also recommended to include communication or dispatch centres in an exercise as they are integral to responses.

In summary, it was noted that industry needs to design programs that provide the best knowledge to those who would potentially respond, rather than dictating that all responders must be involved, since the NEB has no regulatory control over first responders.

Frequency and Exercise Formats

The level and frequency of involvement for exercise participants vary, and consensus was that while guidelines for frequency are helpful, the actual frequency and mix of exercises should be left up to individual organizations, based on their particular situation.

Companies shared their processes for exercise development. As in the previous oil session, participants asserted it should be up to individual companies to determine the right mix of tabletops and full mock exercises for their company. Every company is different and has different mixes of facilities, population levels, and number of incidents.

As well, companies should be able to manage their activities for each facility as they see fit. For example a company should be able to enter into a Memorandum of Understanding (MOU) for operation (including their EMPs) with other companies in each area, depending on their activity levels. For example a company may have an MOU with an adjacent company because they only have two kilometres of line and one landowner.

It was suggested that tabletop exercises are the most cost-effective type of exercise. There is, however, value in full-scale exercises, too. Frequency of various types of exercises should be dictated by circumstance. For example, if staff turnover is high in an area, then frequency should be greater to accommodate new staff. It was also suggested that frequency of full-scale exercises may also depend on whether there is an appropriate existing program in place, as well as on the financial capability of the company.

Competency

Participants identified that competency can be determined through exercises, and special training can then be organized, according to need. The bottom line was identified as "when an emergency occurs, people need to be able to handle the demands of a stressful situation". Competency can be established through training and experience and by participating in tabletops and full-scale exercises.

It was discussed that the word 'competency' is inaccurate and difficult to measure; perhaps the focus should be on being trained and able to meet the task rather than being competent. What is needed is to base competency on risk; and each company should be able to demonstrate and justify its risk assessment and should be able to defend it during audits and assessments.

Human Environment

Socio-Economics in the NEB Filing Manual

Pat Ruby
Margaret Barber
Michael Benson

This session reviewed the socio-economic sections of the filing manual (FM). Other sources of guidance were also reviewed, such as pre-application meetings, review and learn meetings following decisions, the NEB library and web site. Also, individual staff members can provide guidance, depending on the information required. The history of the filing manual was described along with its goal-oriented approach.

Topics for discussion included:

- Filters
- Triggers
- Human occupancy and resource use
- Heritage resources
- Traditional land and resource use
- Social and cultural well-being
- Human health
- Infrastructure and services
- Employment and economy
- Consultation

Industry was asked to provide feedback on the FM. Most of the feedback focused on traditional land use and consultation. The following feedback was provided on the selected topics.

Traditional Land and Resource Use

- There is confusion regarding traditional territories vs traditional use.
- If an application is approved in traditional territories, does it validate Aboriginal land claims?
- How long does an Aboriginal community or individual have to live in an area for it be considered 'traditional' territory.
- What is the link between traditional knowledge (TK) and consultation? How should TK be collected? Should TK be collected through consultation?
- Differences between private and Crown land practices should be clarified
- TK should be included in the company's program
- Confidentiality issues need to be addressed regarding effects on traditional use. How much information can be made public or not? How does the Board consider this?
- TK is more important in the North and confidentiality is an issue. Who owns this knowledge and when and by whom can it be used in future?
- Due diligence and TK are related – cultural wellbeing, traditional use and human health are all intertwined and need to be cross-referenced by the company as well as by the NEB in the FM
- Defining current traditional land use areas is complicated, for example, hunting may take place in a certain area, but the wildlife being hunted may come from a broader area. Hunters and other native people may rotate between traditional land use areas; what they use today may not be what they need over the long term.
- Pre-application meetings should take place
- There should be a distinction between current and past or historical traditional use, although

companies may not want to broaden the definition

- How do you prove what is not there, for example, if the area has been private land for a long time. How do you prove it is not traditional use? What kind of evidence is needed?
- Can anyone make a land claim?
- Sometimes it is difficult to identify who the Aboriginal spokesperson is, whom the company should be working with
- How does the NEB determine what is 'true'?
- British Columbia and the Aboriginal community are developing non-prescriptive guidelines. Federal and provincial authorities need to communicate better.
- Regarding Aboriginal consultation court cases, there is a need for timeliness to get clarity
- Notification is appropriate for Aboriginal groups. It is important to solicit their point of view.
- Build a relationship; letters and other print materials may not be read
- Should non-status Aboriginals be included if they are not recognized in the Act?
- What detail is required in reporting, e.g., individual names, location? What about names from a public meeting?
- TK will become more important, especially in the North

Consultation

- How does the NEB define 'potentially affected'? Could there be examples given?
- With goal-oriented regulated – is the goal resolution of an issue? If a company followed the process, would that be sufficient? Perhaps it is the process that is most important.
- There should be a definition of consultation
- Key issue is how to start the consultation process
- How can companies address contextual information, such as political positions
- Should certain time frames be established?
- What kind of guidance can be provided on 'last minute involvement'?
- Is there such a thing as 'over consultation'? Is this considered?
- What about consultation with other regulators? What are the expectations?
- Is there a difference in the requirements for reporting on resolved vs unresolved issues?
- Sometimes resolution of an issue is not the landowner's goal. How will that be dealt with?
- Over the long term, reporting requirements are too onerous – filing all contacts with all groups is too much
- Recreational users are often not there for the whole year; should they be considered directly affected?
- How much consultation is required to address human health issues such as stress, emotional problems, and inconvenience. What would be the weighting of the Board on these issues?
- If a company is using an existing right-of-way, is the same comprehensive consultation required – the whole nine yards?
- Need more description on how socio-economic consultation and monitoring is linked to biophysical consultation and monitoring. What should be the tracking system?
- Consultation re: streamlining order – when would consultation not be necessary for smaller projects? How much consultation applies in every case?
- There is a need to identify subpopulations of affected people – e.g., the elderly. Some of these groups may be a considered vulnerable populations. The company should identify what percentage of the total affected population is represented by vulnerable groups.
- There should be a way to distinguish between the interests and concerns of stakeholders vs actual impacts on them
- There should be clarification regarding notification and consultation, when each is required. In most cases notification is not sufficient, there needs to be the opportunity to discuss concerns.
- Companies should define and clarify what they mean by notification vs consultation. The International Association for Public Participation (IAP2) web site may be useful.

- There is also the need to clarify the differences between Aboriginal and general consultation
- The NEB must consider how to deal with stakeholders demanding to be paid for consultation, as well as whether intervenor funding should be provided, for example, for Aboriginal groups
- The NEB should provide guidance early on in the process
- Company should define and clarify the terms it uses with stakeholders
- Companies should consider buying lunch, payments, etc to recognize landowners' time as valuable
- What would the NEB's reaction be for a group that objected to an application based on the fact that they had asked for a level of payment that the company could not agree to
- Consider intervenor funding
- Why is it the company's responsibility to report on other Crown consultations? How is the company supposed to know?
- If a stakeholder is using a project as a forum to voice a concern about a government policy, how should this be addressed?
- Does the NEB consider the effort made by the company to resolve any issues?
- Should the company always need to justify when no consultation is carried out?
- Consider all affected parties
- What details of consultation does the NEB require? For privacy reasons, should all the personal details (name, address, phone, personal issues) be included in public documents? Does the NEB need these details to be filed or just retained by the company? Can these personal details be filed separately and confidentially?

Monitoring

- How do you monitor for socio-economic impacts? What issues should be monitored?
- How do you monitor cultural wellbeing? What is the responsibility of the company here?
- Monitoring cultural wellbeing is perhaps more of a government responsibility.
- What can the company provide in terms of monitoring?
- When should monitoring be qualitative vs quantitative? When would quantitative data be required?

Triggers

- Preamble to triggers in the FM is not clear. If there is a public concern, is it supposed to be resolved before the application is filed? What if the public is using the application as a forum to address other issues?
- How much weight should visual aesthetics have? If a company is required to plant vegetation for one project, will that be required for all?
- What is the expected level of detail? It is difficult to know how to avoid information requests
- Property values may be affected – a trigger?

General Comments

- The electric companies are struggling to use the manual
- Good to have tables and charts as examples of how to present information
- Expectations for pre-application meetings should be clarified
- What does the application fee cover?
- Who should attend pre-application meetings?
- Should safety be included?
- Table A-3 --- Heritage resources – why are there no archeology issues referenced?
- May need to separate socio-economic assessments for the *Canada Oil and Gas Operations Act* and South of 60
- Should identify company vs government responsibilities, and include links between them
- Identify opportunities for communities, such as training
- Design sections of the manual specific to each province and territory

Negotiation Strategies: How to Negotiate Better Agreements with Less Board Involvement

Karla Reesor
Lorna Patterson

Board staff described an interest based negotiation approach, using mostly land examples, yet the theory and processes could apply in other business and personal situations as well. Negotiation helps get our needs met, preserves or enhances relationships, may be faster or cheaper than other decision-making process, and allows us to get on with business.

Excuses to not negotiate should be examined. For example, sometimes "it is just about money", but sometimes it becomes about money when one party stonewalls on other options. Companies should plan ahead to make sure there is time to negotiate. Consideration should be given to the long-term costs of regulatory processes to resolve landowner concerns and the scrutiny when landowner issues are made public.

Negotiation styles can include: competing, collaborating, compromising, avoiding and accommodating. Each of us usually has a dominant style, although using a collaborative approach increases the likelihood of a win-win outcome. The "spiral of unmanaged conflict" was described, showing how escalation leads to the polarization of parties' positions. The root of a conflict can be traced to interests not being met for one or both parties. A "position" is generally one person's solution to the problem. Interests can be related to content (economics, environment, land concerns, etc.) process (efficiency, balance, timing, fairness, etc.) and relationship (respect, recognition, trust, etc.).

The speaker reviewed guidelines for active listening, an important component in negotiation. It is important to understand what about the issue is important to the other party. Listening requires a psychological involvement with the other person.

The speaker proposed an alternative style, an interest-based collaborative approach where parties work together to:

- Jointly develop the negotiation process, and indicate a willingness to create a win-win situation
- Identify/clarify issues – get all the issues on the table
- Explore interests to determine what's important, priorize issues, explore desired outcomes
- Generate options – brainstorm possible solutions, decide whether you want objective criteria
- Assess options against interests, to determine which best meets both parties' needs
- Reach agreement -- document commitments, create an action plan
- Act on agreement

When faced with more challenging situations, consider:

- Conflict management training
- Prompt response to issues
- Seeking assistance from others early before conflict escalates and parties become more entrenched
- Taking advantage of neutral mediators
- Verifying that you are negotiating collaboratively

The NEB has an Appropriate Dispute Resolution (ADR) program to educate, facilitate and coach companies and stakeholders. The NEB's Landowner Complaint Resolution Program services are available to parties as well. Also, the Filing Manual outlines expectations about consultation, along with negotiated settlement guidelines related to tolls and tariffs.

Other resources available to companies include those offered by the Company to Company (C_2C)

ADR Council formed in 2003. The Council is an industry-initiated group comprised of 12 industry associations and includes representation from the NEB and the Alberta Energy and Utilities Board. The Council developed an ADR Handbook that offers negotiation information, scenarios and tools and is available for purchase. Conflict management training is also available through a variety of suppliers, including the Alberta Arbitration and Mediation Society (AAMS), Mount Royal College, and the Justice Institute.

The session participants were asked to comment on what worked well in negotiations – best practices – and what more could the NEB do to support negotiated agreements? The following comments were offered:

Negotiation Best Practices

- Maintain relationships with the vast majority of landowners – all those who sign easement agreements
- Find out needs and interests early in relationship building
- Build personal relationships and trust
- Stick to predefined principles – company directives – don't vary from landowner to landowner – consistency
- Listen to other side; allow them to get off topic and vent. They may be frustrated with other things. Allow enough time for this to happen.
- Clearly define boundaries about what can or cannot be negotiated early on; prioritize the issues that can be negotiated
- Strategic use/location of core staff/resources
- Identify issues early on
- Good neighbours principle
- Fairness, honesty, transparency
- Let other side think they are winning
- Keep communication lines open
- Think outside the box
- Lay out needs and interests
- Listen
- Show empathy
- Give opportunity for input, sense of ownership for the solution
- Attempt first contact before rumours
- Use open ended questions
- Give enough time
- Let them vent, don't respond to the anger
- Be sincere
- State up front that the goal is an ongoing relationship
- Ensure proper notification
- Separate emotion from the fact

What Could the NEB do?

- On encroachments, the NEB gives instruction to landowners to go back to company -- How could NEB provide more support, instead of a circular loop?
- To the extent it is able, the NEB should support existing agreements
- The NEB should take the opportunity to talk with communities in rural areas, including Aboriginal -- give a Negotiation 101 for landowners
- There is an intimidation factor associated with the companies. The NEB can help by developing capacity of communities to negotiate.
- Would like to have NEB ADR provide construction compliance assistance – resolve more compliance issues rather than wait for orders – ADR should get involved during the construction stage
- Get involved prior to facilities or a detailed route hearing – get involved early. (Industry needs to inform the Board if assistance is needed)
- Get rid of frivolous claims
- More information for the landowner
- When difficulties arise, NEB is not firm in supporting the company holding the permit (easements)
- Help resolve issues between regulated companies and construction compliance group
- Don't go over old ground
- Focus on the issue, not the emotion – be objective

Landowner Engagement – Towards Program Improvement

Janet Walker
Deborah Kuchinski
Paul Georgison

The NEB's Landowner Complaint Resolution Program delivers a consistent and timely process for resolving landowner complaints. The program includes a process flowchart and written procedures for NEB staff to process concerns, service standards for the NEB to address complaints, and landowner complaint tracking.

The flowchart identifies decision points, tools available to assist in resolution of landowner complaints (i.e., information requests, inspections, appropriate dispute resolution (ADR), Board decisions), and means to measure the success and improve the time required to resolve complaints. The Landowner Complaint Resolution Program Service Standards are detailed below.

Respond with Initial Course of Action:	*100 percent within 10 calendar days*
Resolve The Complaint:	*80 percent within 60 calendar days*
Circumstances Affecting Resolutions:	*Formal Board Process; Weather or Seasonal Factors*

Eighty-nine percent of landowner complaints resolved in 2004-2005 were resolved within 60 days.

NEB staff also shared some common landowner concerns and complaints regarding land agents, who account for approximately 10 percent of the number of complaints. Landowners have the following expectations about land agents:

- Knowledgeable
- Prepared
- Trustworthy
- Continuity (want the same land agent)
- Active listening and understanding concerns
- Action-oriented approach

The remaining 90 percent of complaints deal with safety or operational concerns, or environmental impact and reclamation complaints. Access issues are becoming more widespread. The NEB is concerned that it is only seeing the tip of the iceberg – that it is not aware of all the issues and how they are being addressed. It is important that the NEB keep current. Six discussion groups provided the following unedited comments.

Establishing/Maintaining Relationships

- Key to good business are good relationships
- Understand literature and documents on both sides of the table – landowners have to understand as well as industry
- Keep informed of cultural issues especially in remote communities with different approaches
- Understandable, clear and reliable information required, consistent in message
- Typical group information should be provided, with individual follow up
- Start early with key players – don't wait until the last minute
- Company representatives should live in the local community for credibility
- Coordinated information by organizations, companies, agencies
- Categorize landowners (in a good way) e.g., if there were issues before, if they are knowledgeable or not

- Get to know the players in a community, their roles and mandates, the decision-makers
- Landowners should be aware of other processes and projects in their area
- Better coordination with other companies
- Keep current on local issues
- Take time and care about information that is delivered – don't be in a hurry
- Get learnings and internal feedback from your experiences
- Understand the implications and impacts of the project on the community
- Be clear about your wants and desires, as well as theirs
- Be aware of changes in the project – and communicate them to landowners
- Ensure there is ongoing and regular dialogue
- Distinguish communities with different needs

Successes/Challenges

- Landowners use the process to extract benefits from regulators
- There should be consistency – landowners who hold out should not be rewarded, cooperators should not be penalized
- Landowners who call NEB get attention first
- Compensation does not always show up as the issue – an environmental issue may be presented, but the landowner doesn't want it fixed, they want compensation – need to get clear on this scenario earlier. Putting it in writing earlier can help to identify these situations
- There are always a few, no matter what, who will never be happy. Companies must document their efforts and also allow a cooling off time
- Lack of NEB presence – not familiar with territory, population is not aware, not familiar with construction techniques – comprehensive public awareness program needed by companies
- Continuity – use of contractors may be a problem – push documentation
- Lease land agents on a regional basis to address continuity issues
- Irreconcilable differences – time may make it worse – need an efficient regulatory process to deal with things that have really broken down. They are dealt with quickly through arbitration
- Regulators should not over-react, should learn background
- ADR conversations have ended up in public reports (see Footnote[3])
- How do you know when the file is closed? Need a letter from NEB, perhaps quarterly to identify outstanding issues

NEB Service Standards

- How do service standards and reporting align with expectations?
- The NEB will be reporting its performance through its web site, annual reports and through a performance report – will there be some accountability?
- How were the targets decided? (NEB looked at six years of data and came up with somewhat more aggressive timelines)
- NEB set similar targets for facilities applications
- Very beneficial to get an initial course of action in 10 days. Eighty percent is a good target for resolution – will not achieve 100 percent
- The *National Energy Board Act* sets out an arbitration process for landowner compensation issues – there are no service standards for that – can take panels up to two years to render decisions
- Natural Resources Canada also needs a timely complaint resolution process
- Does industry have its own service standards? Generally, no, there are no solid numbers. More need to resolve landowner issues before pipe goes into the ground

3. Through follow-up, the participant indicated that their concern stemmed from "ADR-like" meetings with Board staff, company representatives and landowners and not from the official ADR process. The concern related to opinions/informal discussions among parties being documented in an NEB inspection summary with the potential for the discussion to be misconstrued or result in binding commitments in the future

- Focus groups will further work on service standards – could bring targets down over time
- Lay out strategy for remaining outstanding 20 percent, e.g., mini-hearing to bring finality

NEB Decision Process

- Gives landowners an avenue to be heard – that someone is listening – getting on record
- End of day, the NEB provides a decision that is unbiased
- There is more access to information from NEB through the web site, e-filing – landowners don't have to rely on distribution lists – can get on web site
- Impartiality – quasi-judicial framework
- Trust process – opportunity to be heard – make an effort to accountability
- Could provide more detailed intelligence on decisions for ADR, landowner and company
- Sometimes there are win-win decisions – NEB should be clear about that
- There should be more information on the nature of complaints for industry
- Who is responsible to raise landowner awareness of the NEB? It is needed. Synergies between NEB and industry to do that?
- More information needs to be provided to landowners regarding their rights – disclosure of information, timing, when does NEB step in?
- Clarity re: collaborative efforts

Knowledge Management

- Start talking early with landowners, maintain consistency with land agents
- Regular checks with process
- Is this the NEB's authority? Needs to be determined
- Where is the consistency with land agents – especially between different provinces?
- Any best practices for land agents?
- There is science behind landowner issues – have to get to the root of it – then discover it is sometimes a compensation issue
- What to share re: landowners? Companies don't talk about issues with landowner groups

Emerging Topics

- Landowners are forming groups, becoming more aware, more participative, and more knowledgeable about regulations and guidelines
- Must maintain long-term relationships
- Long standing complaints not resolved
- Post construction reclamation activities, follow-up monitoring, consistency re: land agents
- Abandonment is becoming a theme – landowners becoming more nervous as pipe ages
- Obtaining access from landowners more difficult
- Effectiveness of fencing
- Consultation and how to keep off right-of-way

Aboriginal Engagement (AE): What could it be for the NEB?

Chantale Simons

The Aboriginal Engagement Program at the NEB has been in place for two years. The focus of the session was on 'engagement', not socio-economic content or Crown consultation. There is a separate Crown Consultation Unit (CCU) to carry out that function with regard to the MacKenzie Gas Pipeline (MGP). The purpose of the Board's AE program is to help the NEB develop and maintain an understanding of the evolving participation/ communication needs of Aboriginal peoples potentially affected by its decisions. The AE program applies to all NEB dealings with Aboriginal people and is ongoing.

The objectives of the program are to:

- Increase internal capacity (effort so far has focused on this objective)
- Raise awareness of the NEB to Aboriginal communities (outreach)
- Promote dialogue and remove barriers (process improvement)
- Encourage dialogue between Aboriginals and other interested parties (guidance)

AE creates and maintains Aboriginal community profiles, manages information through a database and repository, tracks issues, provides cross-cultural training, maintains contacts and creates engagement strategies. AE also has a role in doing case-specific outreach and follow-up and has introduced itself to a number of groups. AE has been involved in developing plain language texts and clarifying hearing process participation options.

An industry member asked about the link between AE and CCU regarding CCU evidence in NEB processes. Does AE provide feedback on the evidence from the CCU to the Board? The speaker indicated that there is no link and that AE does not review CCU evidence. Rather the CCU evidence is used in the same manner as other evidence.

Another participant wondered whether the community profiles are undertaken independently or collaboratively. The speaker indicated that creating the profiles is an internal exercise for the moment -- from information that is already on the public record. However, the Board is about to launch a data gathering initiative that will require input from the communities. This will create an opportunity to share their profile with them to ensure it is accurate. There are currently no plans to share the profiles with industry, but that it could be considered if there is an interest. A participant noted that it might be a good idea for the NEB to compare its profile with the band's own profile.

An industry member wondered if he was meeting with an Aboriginal community, should the CCU be contacted. The speaker noted that the CCU only applies to MGP and not for any other projects. There is no other referral agency addressing Aboriginal issues.

At the last workshop in December 2003, the NEB heard:

- Aboriginal community capacity is not sufficient to address regulatory need
- NEB needs to be out there
- NEB needs to have a clear message
- Industry wants to know how much engagement is enough
- What is the appropriate 'zone of influence' for contacting Aboriginal groups?

What more could the NEB do through AE regarding outreach, process improvement and guidance to companies and parties?

Audience Suggestions

Outreach

- All the relationships between the NEB and the Crown are overwhelming to industry – what will the communities feel?
- Re: the lack of capacity, could there be money from Natural Resources Canada for funding? Where will they get capacity to deal with another layer in the process?
- What would be the message given to communities from the NEB? (There could be conflicts of interest – the NEB should provide information on its role and specifics about the process.)
- How does NEB implement its outreach (any branch)?
- Do a training session where community representatives can come together, like this workshop
- There needs to be better education in the communities – especially defining the NEB role as a regulator and its role in communities
- Provide information on the entire industry, not just specific projects (jobs, etc.)
- Pool for education funding, training facilities
- Community employment officer for NEB
- Talk to companies that have AE plans to learn more about outreach
- NEB has to go out into the communities – not just sit in Calgary
- How much outreach is enough? There is a risk of too much consultation – from a variety of regulators, industry, etc. – education level may not be sufficient to digest all the information
- Communities may be skeptical about government – there is no presence there – what can you do to alleviate these concerns? Use consultants?

Process Improvement

- One window approach with Aboriginal community and industry – too many levels of government
- NEB needs to share community profiles and other data collected – externally
- What is considered to be appropriate levels of AE for companies – give guidance
- Shouldn't NEB work with the community to perfect the profile?
- Aboriginal communities will face barriers to participation – they need funding to participate. The NEB can't provide intervenor funding, but perhaps other government departments or industry could fund. Otherwise it will be a less than satisfactory consultation.

Guidance

- NEB should give examples and case studies of how others have chosen to do AE – there is no one specific model to follow
- NEB and how it is structured – issues authorizations – adequate process and involvement
- Companies not required in B.C. to do consultation but Crown does. NEB has to do adequate Crown consultation.
- Proponent should let NEB know when a project is launched so NEB can engage communities
- Clarify the role of AE prior to the application
- Linkages needed between environmental/ socio-economic/biophysical/Aboriginal. All these processes seem siloed – there are no clear linkages. All these issues are touched on in one meeting.
- Need to clarify NEB's role vs Crown – all stakeholders need this information

The suggestions made will be considered in AE's upcoming work plan for short, medium and longer terms activities.

The audience was offered the opportunity to sign a contact sheet for periodic updates and informal queries related to engagement ideas. The NEB will use this list for keeping in touch and soliciting feedback.

Appendix
Collaborating for Regulatory Improvement
Introductory Remarks to NEB Workshop 2005

Gaétan Caron, Vice-Chairman, National Energy Board
Monday, 6 June 2005
Calgary, Alberta

Introduction

Good morning. Welcome to the NEB Workshop. I am so pleased that each of you has taken the time to attend. With over 400 participants from places such as Calgary, Vancouver, Halifax, Montreal and the North, we are going to have some great discussions during the next three days. We are here to share information with you about many NEB initiatives and to hear your opinions and suggestions regarding these initiatives. And that's what this Workshop is all about – collaborating for regulatory improvement.

This collaborative approach is certainly an evolution for the NEB. I have worked with the NEB in a number of different capacities for more than 25 years. In the last 10 years, however, we have become very explicit in consistently seeking feedback and input to help focus our work, so that we may better serve all of our stakeholders.

During the next three days, you will participate in discussions ranging from the recently implemented Filing Manual to emergency exercises. There is a considerable amount of knowledge in this room and we intend to leverage this knowledge to initiate, develop and refine regulatory processes and programs. By working together we will continue to provide favorable conditions for the physical regulation of Canada's pipeline infrastructure.

My main objective this morning is to share with you the NEB's priorities that are shaping our approach to safety, environmental and economic regulation. By focusing on our priorities, the NEB is enhancing its capability to work effectively and deliver on key results.

After discussing our priorities, I will also touch on some specific work that is going on with respect to emergency management, pipeline integrity and environmental protection.

This will give you a general basis that I think will be of assistance to you as you later participate in the more specific sessions over the next three days.

NEB's Goals

These priorities are about the means we will take to achieve the Board's five goals. I am sure you can associate with these goals and, in that sense, as stakeholders, they are yours as much as they are ours. I am providing them here on this slide so we keep them in mind throughout the workshop.

- Goal 1 – NEB regulated facilities and activities are safe and secure, and are perceived to be so
- Goal 2 – NEB-regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected
- Goal 3 – Canadians derive the benefits of economic efficiency
- Goal 4 – The NEB fulfills its mandate with the benefit of effective public engagement
- Goal 5 – The NEB fulfils its mandate with the benefit of effective leadership and quality management of affected processes

NEB's Regulatory Priorities

Through our yearly strategic planning exercises, the NEB has established six priorities. To establish these priorities we considered evolving social and economic trends, risks; challenges that might influence how responsibilities are carried out; and how to deliver results to Canadians.

The priorities are:

- Goal-oriented regulation
- Energy market information
- Public participation
- Awareness and understanding of the NEB Mandate
- Cooperation and partnerships, and
- Enhanced performance

I'm going to tell you about each of these priorities in more detail.

Goal-oriented Regulation

Goal-oriented regulation is a key priority. The NEB has used this approach to align itself with the federal Smart Regulation initiative. In the next session after me, before the break, Jim Fox, our Team Leader of Regulatory Development, will speak about Smart Regulation and how this federal initiative strives to "contribute to innovation and economic growth and to reduce the administrative burden on business".

The slide in front of you (Figure 1) displays what we mean by the term "Goal-oriented regulation". The term goal-oriented is used to describe a style of regulation in which a mix of goal-based, performance-based and prescriptive components is used.

Regulations that are goal-oriented identify and focus on desired outcomes. They promote the use of management systems to achieve goals and effectively manage risks, while providing the flexibility for regulated companies to adapt to changing conditions. Management systems also allow companies to use new technologies as they are developed and use the most effective solutions for the particular circumstance.

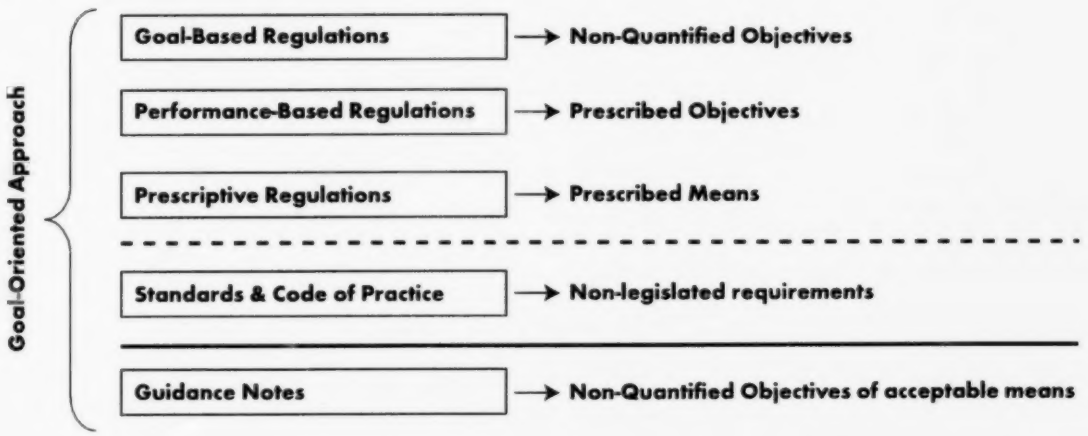
It is also important to note that within the goal-oriented approach, non-legislative requirements exist. These include industry standards and codes of practice, as well as documents such as our Guidance Notes that provide a documented representation of acceptable methods.

For more than ten years, the NEB has been moving towards goal-oriented regulation. A recent survey told us that regulated companies favor the goal-oriented approach and support the development of more regulations in this format.

Currently the NEB has two goal-oriented regulations that have become law, the *Onshore Pipeline Regulations, 1999* and the Processing Plant Regulations. Two other regulations, the NEB Damage Prevention Regulations and the Canada Oil and Gas Diving Regulations, have been drafted and are in the final stages of review by the Department of Justice. We are also working on several other goal-oriented regulation projects. The Canada Oil and Gas Drilling and Production Regulations and the Production and Conservation Regulations are being combined and adapted to the goal-oriented format.

At this workshop, our facilitators will seek your input on a new regulation, the NEB Submerged Pipeline Regulations, and on the updated version of the *Onshore Pipeline Regulations, 1999*. The concept

Figure 1: Goal-Oriented Regulation



of the "Health, Safety and Environment Case" approach that is being proposed for the Submerged Pipeline Regulations will be introduced. Known in an earlier version as the Safety Case, this regulatory model originates from the U.K. and is based on more of a risk-based approach. Participants will have an opportunity to provide feedback on this model, which is new to the NEB.

The NEB will measure its performance towards this key priority by measuring and communicating the percentage of regulations within the NEB's jurisdiction that have been developed, implemented and maintained in a goal-oriented format.

Energy Market Information

The second priority is energy market information. This priority is key in continuing to deliver independent information and analysis on energy markets to Canadians.

In 2003 and 2004, the NEB asked for comments from numerous stakeholders on the effectiveness and content of its energy market monitoring program. Feedback indicated that the NEB has an important role and is in a unique position to provide objective and impartial information to federal and provincial policy makers.

The Board will measure its performance in providing energy market information through feedback received on its energy market analyses, as well as evaluating if policy makers are advised of key regulatory and energy issues that need to be addressed.

At this workshop, we do not have a specific session on energy market information, or on economic regulation more generally. However, we are interested in your input in this area and we will seek it in other ways.

Public Participation

The next priority is public participation. There has been a recent trend towards increased public participation in government decision-making. The NEB is continuing to build its capacity in the area of public participation. Understanding how the public can and wants to be involved with NEB processes helps us to offer effective public engagement options.

Identifying public participation as a key priority will provide an opportunity to focus on identifying new tools in selected areas as well as refining and updating existing tools.

One example is the increased number of opportunities for the public to participate and contribute to the regulatory decision-making process. During the past few years, the Board has increased the number of information meetings and hearings held in affected communities. The NEB has also moved towards holding community consultation sessions to provide information and seek input on many of its new processes.

More recently, the Board has had considerable success with the Appropriate Dispute Resolution process, commonly known as ADR. ADR includes different strategies outside of hearings and court proceedings that people can use to resolve their differences. ADR offers less formal and more cooperative options than the hearing process. These options include negotiations, mediations and workshops. During the ADR session on Wednesday, the facilitators will provide more detail around the ADR process as well as explore methods to evaluate the success of ADR.

The NEB has not only increased and improved the means by which it communicates and engages the public on a face-to-face basis, but it is also reaches out to its stakeholders electronically. With approximately 400,000 hits to our Web site each year, the NEB recognizes its Internet site has become the preferred point of contact for many stakeholders. Our current NEB Web site requires revitalization to ensure that it is accessible to all Canadians. To ensure the Board is meeting the needs of its stakeholders, a session will be held later this morning to offer you a glimpse of the new NEB Web site. The facilitators look forward to hearing your views on this prototype.

The NEB will measure its performance towards contributing towards this priority by measuring the increase in dialogue with our various stakeholders and by soliciting feedback on both new and old processes.

Awareness and Understanding of NEB Mandate

As we have interacted with out stakeholders during the last few years, we have realized the scope and breadth of the NEB's regulatory role is unclear to many people. In particular, we have heard that our responsibilities on pipelines and facilities from construction through operation to decommissioning

and abandonment (I'll call this complete life-cycle) could be better understood. We need to communicate our role more clearly to our northern partners as well, and also when dealing with the routine applications and operations aspects of our business with the smaller Group 2 companies.

By identifying the NEB mandate as a priority, the Board will consciously deliver specific activities to improve stakeholder awareness of the NEB and increase the understanding of its mandate.

We already publish an annual report, a Report on Plans and Priorities, and an annual Performance Report. But there is an opportunity to broaden the reporting capacity and leverage communication efforts to increase stakeholder understanding of the NEB's role.

Part of the NEB's mandate is regulating safety. In April 2003, the NEB published its first in a series of reports on the safety of the companies we regulate. Focus on Safety – A Comparative Analysis of Pipeline Safety Performance was aimed at providing a clear understanding of the safety performance of the NEB-regulated oil and gas pipeline industry. The second report, published in March of 2005, is entitled "Focus on Safety and Environment – A Comparative Analysis of Pipeline Performance" and provided data on the safety, integrity and environmental performance of our regulated companies. Copies of this latest edition of the "Focus on Safety and Environment" are available and the results of this report will be reviewed and discussed during a session on Wednesday.

Incident reporting is also within the mandate of the NEB and companies regulated by the NEB are required to report certain events as prescribed under a number of regulations, Board Orders, Certificates and Board letters. To address some confusion around reporting requirements, we are developing a guidance document to clarify the requirements. This guidance document will be introduced at the workshop with considerable opportunity for discussion and input.

The NEB will measure its performance towards building a better understanding of its federal role by evaluating awareness of the NEB and its role and by improving the reporting of safety, security and environmental knowledge.

Cooperation and Partnerships

The NEB continues to work with a number of regulatory agencies to ensure that environmental assessment and regulatory issues are dealt with in a coordinated and timely manner. The NEB has identified cooperation and partnerships as a priority as they provide opportunities to improve processes and use resources more effectively for all parties involved.

One partnership is resulting in the development of a memorandum of understanding between the National Energy Board and the Office of Pipeline Safety, commonly known as OPS. The OPS regulates safety, reliability and environmental soundness for U.S. natural gas and hazardous liquid pipeline facilities, while the NEB regulates aspects of the energy industry in Canada including the construction and operation of inter-provincial and international pipelines. The pipeline infrastructure in Canada and the U.S. is interconnected. Therefore, we recognize that cooperation and partnerships between the two agencies could contribute to the development and implementation of a more efficient regulatory program.

The terms of agreement of the MOU have been drafted. They support the exchange of information between the two agencies and outline that initiatives may take the form of staff exchanges, emergency management planning sessions or exercises or other joint training initiatives intended to increase skills and knowledge. The agreement also extends the opportunity to observe when either party undertakes a compliance audit on a pipeline that crosses the border. And finally, the MOU indicates that if an enforcement action is taken on a pipeline that crosses the border, the regulator commencing the action shall notify the other. This MOU will serve to better protect the pipeline infrastructure of both countries and better utilize our limited resource base.

We will measure our success in this priority by the number of process improvements and partnerships built through inter-agency cooperation such as this one.

Enhanced Performance

The last priority targets enhanced performance. You may have noticed that each of the proceeding priorities has performance indicators to measure

our success in achieving the objective. We aim to have a performance-based culture of excellence. This culture will be based on the expectation of enhanced results both internally in how the NEB operates its business as well as externally for its stakeholders.

Internally, the Board has begun implementing an ISO-based quality management system that will help guide improvements in our organization. We are currently defining inputs, ensuring our work processes are documented, and measuring outputs against our stakeholders needs. In learning about management systems and the efficiencies that can be gained from well-coordinated processes and effective resource utilization, the NEB has chosen to reorganize and create a new business unit. The new business unit, called Policy, Planning and Coordination, will manage the "plan", "measure" and "improve" activities within the NEB management system cycle. The "Do" type activities, such as facility applications, and NEB inspections and audits, will continue to be managed within the Applications and Operations business units.

One of the first improvement initiatives based on the principles of a quality management system is the development of an integrated compliance program. This initiative will integrate knowledge gained from application, inspection and audit processes to better determine a compliance plan and allocate appropriate resources for further inspections or audits. The details of our quality management system and its integrated compliance program will be discussed at sessions being held this afternoon.

Enhanced performance will first be measured through a full implementation of the quality management system. An external auditor will visit the NEB next March to evaluate the level of implementation and identify gaps.

This concludes my discussion on the NEB priorities, yet I would like to take a few moments to mention some specific work that has been going on with respect to emergency management, pipeline integrity and environmental protection.

Emergency Management

At our last Workshop in December of 2003, participants told us that they would like the opportunity to explore different methodologies to identify potential hazards and put in place effective emergency management programs. On Tuesday, a full day of sessions will be held to focus on emergency management and explore the required components of an effective emergency management program including emergency exercises.

Since the last workshop, the NEB Act has been amended to provide the Board with a clear statutory basis for regulating the security of energy infrastructure under its jurisdiction. The NEB has completed a number of Pipeline Security Assessments on NEB-regulated companies to provide a better understanding of how pipeline facilities are currently managing security and the security issues that are facing the regulated companies. These assessments will, in time, assist the NEB in developing and implementing security focused regulatory tools.

The most recent Pipeline Public Awareness Workshop was held in Montreal, Quebec in September 2004. This regular workshop continues to serve as a means of increasing the awareness of pipelines and the precautions to be taken when undertaking any activity having the potential to damage a pipeline. This latest Awareness Workshop included first responders as well as other local stakeholders and emergency personnel.

Integrity Management

The NEB's oversight of integrity management currently consists of integrity audits, inspections and periodic meetings with regulated companies.

The meetings with regulated companies have been insightful and served as an effective method of sharing information. The results from audits and inspections have been interesting and have helped better define our challenge. An adequate integrity management program does not necessarily mean that adequate company field practices are in place. Twenty two percent of findings identified through NEB audits were related to integrity management.

Considerable time and effort have recently been dedicated to the development of integrity performance indicators. Integrity indicators will provide some indication of the effectiveness of the companies' integrity management programs as well as the effectiveness of the NEB's regulatory program.

Both of these topics will be discussed in detail later today. In the Integrity Performance Indicators session, NEB, CEPA and Company panelists will discuss proposed indictors and their status.

Environmental Management

The Environmental sessions at the 2003 Workshop took a lifecycle approach towards the discussion of environmental issues and topics. From design and construction through to abandonment and decommissioning, the requirements for environmental protection were discussed and successful methods to minimize disturbance or mitigate effects were shared.

Since 2003, the NEB Filing Manual has been issued and implemented. The new manual has been used to guide and shape several applications through the approval process. At this workshop, a session will be held to receive feedback on the new NEB Filing Manual and it is hoped that users will openly share their experiences and opinions.

For several years the NEB has used the percent of environmental conditions that achieve their desired end result (or DER) as a key performance indicator for evaluating environmental protection. This performance indicator has successfully guided companies to define and focus on the desired result of environmental protection as opposed to simply completing an identified activity. With the continued attention on environmental protection and the increased attention towards improving environmental performance, there is an increased desire to identify and engage additional environmental performance indicators. The session on Tuesday afternoon will enable participants to share their experiences in the development of environmental performance indicators and successes they have had in improving environmental performance.

Conclusion

Over the course of this workshop, you will be asked to contribute to discussions and share your experiences. Please be open and direct. Comments provided today will contribute tremendously to the NEB achieving the priorities I have spoken about today, and ultimately to achieve our common goals.

We share a common goal: the continued safe, reliable and environmentally sound operation of Canada's pipeline infrastructure. With true collaboration between industry, regulatory authorities and other stakeholders, we will develop a better understanding of each others' interests, our priorities and responsibilities. Delivering on our priorities will ensure continuous improvement in the way we regulate and we will be well positioned to carry out our role in the development of Canada's energy industry.

When you return to your office, you will be asked to provide feedback on this event through on-line survey. Please take a minute to give us your feedback. Your response will help us identify key topics and plan for future events.

On our side, after the workshop, we will produce a summary report in both languages by mid September. The summary report will be mailed to you as a registrant and it will also be made available on our Web site. Therefore, you'll be able to know what went on, even at those sessions you were unable to attend, because you cannot be at more than one place at a time! Further follow-up will occur, of course, in each of the subject matters being covered at the workshop. So the process of consultation and engagement will not end on Wednesday!

Thank you all for choosing to attend NEB Workshop 2005. Have a great three days!